



W CR 112: B&W Document
Danielle Sattman to: Robert Werner

05/27/2010 01:16 PM

History: This message has been replied to.

Danielle Sattman Soule
Project Manager
Superfund Section
Remediation Division
Texas Commission on Environmental Quality



512-239-0158 b&w 1.pdf b&w 2.pdf b&w 3.pdf

**EPA
INSERTED
DOCUMENT
SEPARATOR**

NEIA
FO
(7)

Site Discovery & Assessment

Facility Name ABANDONED
Building (B+W)

TXD# : 481-055-080

SW Reg# NONE

Other # TX# : 18065

County MIDLAND



U.S. Environmental Protection Agency

Superfund Information Systems

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CERCLIS Database

Archived Sites

Record of Decision
System (RODS)Superfund's Data
Element Dictionary
(DED)Order Superfund
Products

Archived Sites

ABANDONED BUILDING(B & W)

[Site Information](#) | [Action](#)

Site Information:

Site Name: ABANDONED BUILDING(B & W)**Street:** #3 INDUSTRIAL LOOP**City / State / Zip:** MIDLAND, TX 79701**EPA ID:** TXD981055080**EPA Region:** 06**County:** MIDLAND**Non-NPL Status:** NFRAP

Actions:

<u>OU Action Name</u>	<u>Qualifier</u>	<u>Lead</u>	<u>Actual Start</u>	<u>Actual Completion</u>
00 DISCOVERY		S		05/08/1985
00 PRELIMINARY ASSESSMENT	L	S	05/01/1987	05/01/1987
00 SITE INSPECTION	N	S	12/01/1988	12/01/1988
00 ARCHIVE SITE		EP		08/01/1994

[OSWER Home](#) | [Superfund Home](#)#3 Industrial Loop SiteMr. Jimmy Tedford
Federal Deposit Insurance Corporation
P. O. Box 3148
Midland, Texas 79702

Jimmy Tedford

(800) 592-4023

NT Inspections

8/17/97

B&W WELDING AND CONSTRUCTION
III. Site Investigation

B&W WELDING AND CONSTRUCTION
SITE INVESTIGATION

Prepared for:

Texas Water Commission
State Superfund Unit

D87052
JN 117203

JONES AND NEUSE, INC.
Engineering and Environmental Consultants
Austin-Houston-Belton-Corpus Christi-Temple-Orange

© Jones and Neuse, Inc.
1987



JONES AND NEUSE, INC.

Engineering and Environmental Consultants

AUSTIN - HOUSTON - BELTON - CORPUS CHRISTI - TEMPLE - OKLAHOMA

August 31, 1987

Ms. Christy Smith, Head
State Superfund Unit
Hazardous and Solid Waste Division
Texas Water Commission
P.O. Box 13087
Austin, Texas 78711

Re: Site Inspection of B & W Welding and Construction
JN 117203
TWC 14-70020

Dear Ms. Smith:

Contained herein is the final Site Inspection Report prepared pursuant to the investigation of the above referenced facility. We trust that you will find this report acceptable and have enjoyed working for you and the Commission on this project. Should you have any questions or require any additional information, please feel free to call me at 512/327-9840.

Sincerely,
JONES AND NEUSE, INC.

Michael G. Dick

Michael G. Dick
Project Manager

MGD/jlb

Attachment

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- A. Data Collection Guideline
- B. Laboratory Data Sheets
- C. County Map
- D. USGS Map

SECTION I
EXECUTIVE SUMMARY

JONES & NEUSE

I. EXECUTIVE SUMMARY

Jones and Neuse, Inc. (JN) was retained by the Texas Water Commission (TWC) to perform site inspections at potential hazardous waste sites. The site described herein was identified pursuant to 31 TAC Sections 335.341-335.346 and TWC Contract No. 14-70020 concerning the hazardous waste facility assessment and remediation program, commonly referred to as the State Superfund.

The B&W Welding and Construction site is located at No. 3 East Industrial Loop in Midland, Texas. The site was formerly used by B&W as a metal fabrication and welding shop. As a result of foreclosure, the property is presently controlled by the Federal Deposit Insurance Corporation (FDIC). On November 1, 1984, while conducting a complaint investigation at the site, a TWC inspector found green colored water in an on-site water well. A sample of the water was collected and analysis of the sample showed a chromium concentration of 1.6 ppm. Another well sample collected by the FDIC in April, 1985 contained a chromium concentration of 2.5 ppm. Several off-site wells in the area were sampled by the TWC in 1985 and none of the samples contained chromium above the drinking water standard of 0.05 mg/l.

Extensive sampling of area soils by the TWC have not identified chromium contamination. According to a memo from the TWC Odessa Office, a possible source of the chromium found in the B&W well is a pit partially covered by concrete located on property south of the site (see Figure 1). This property contains two caliche pits that have been filled with miscellaneous trash. The south pit is covered by concrete. TWC sampling of one of the north pits did not indicate chromium contamination. No samples have been collected from the portion of the other pit covered by concrete. However, a TWC sample collected from an uncovered portion of the pit did not contain leachable chromium. A TWC memo discusses one soil sample that was reported as being collected "between the concrete and asphalt" that showed a

chromium concentration of 580 ppm. However, according to Matt Tokheim of the TWC Odessa office, the location of the sample was Maverick Drilling which is located $\frac{1}{2}$ mile northwest of the site.

A site inspection was conducted by JN on March 17, 1987. This inspection revealed that the well at the B&W site is completed below grade and is not properly protected from outside sources of contamination. Field screening of soils around the well indicated the presence of chromium; however, samples submitted for analysis did not reveal leachable levels of E.P. Toxic chromium.

Area water wells produce water from the southern most extension of the Ogallala Aquifer. At the site, the Ogallala water table is about 35 feet below the land surface and the aquifer is about 50 feet thick. The unsaturated zone is composed of predominately medium to coarse sands and gravels with minor clays.

SECTION II
SITE INSPECTION NARRATIVE

JONES & NEUSE

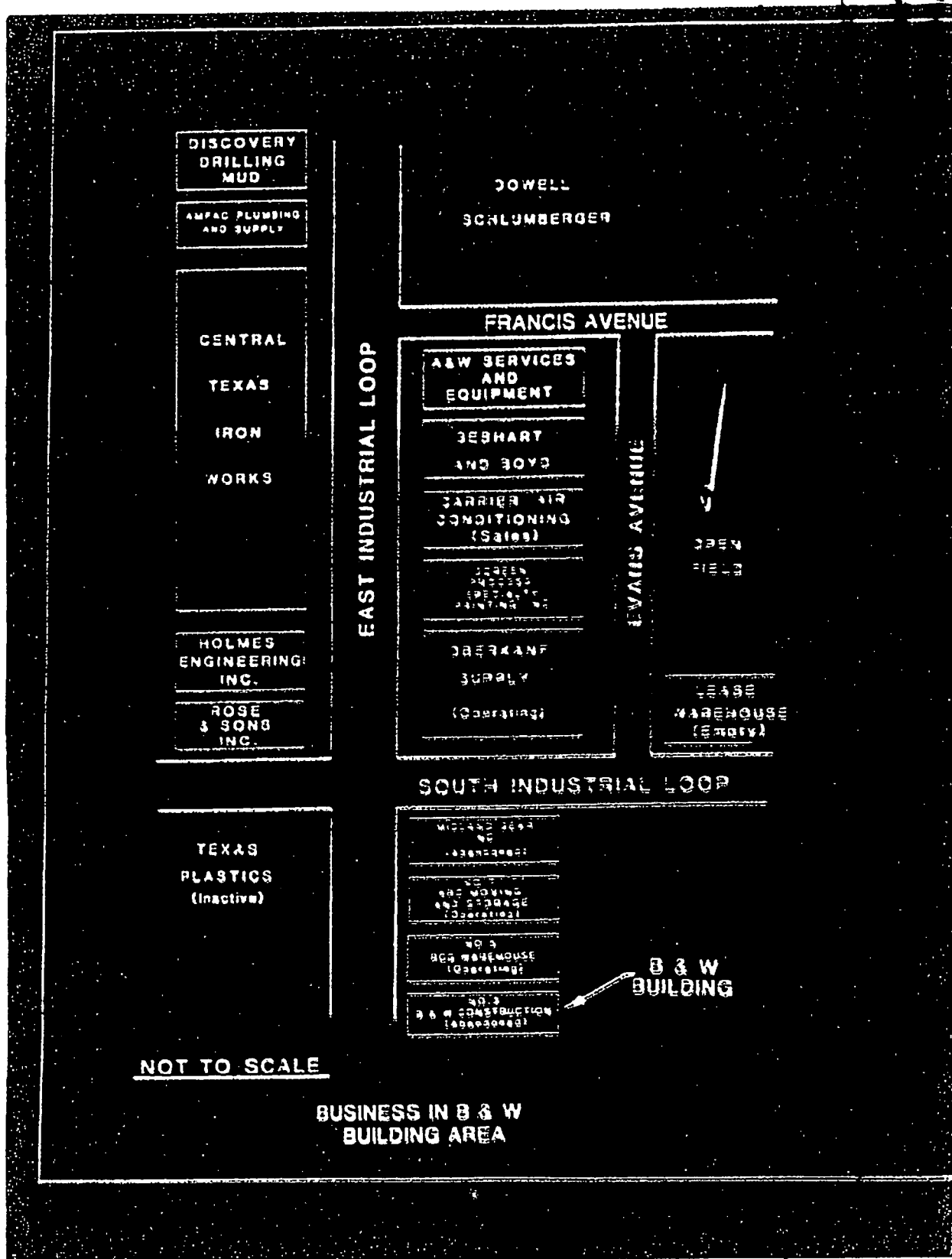
II. SITE INSPECTION NARRATIVE

Jones and Neuse, Inc. representatives were accompanied by Kate Arthur with TWC during the site inspection. JN arrived at the site at 8:15 a.m. and discovered that the gate and building at the site were locked. A key to the building was obtained by Ms. Arthur from the FDIC office in Midland. While waiting for the key, the team members investigated the property to the south which contains the cement covered pit suspected by the TWC Odessa office of being the source of the chromium found in the B&W well (see Figure 1). The property is now owned by Mr. Will B. Brinson (915/699-4081).

The soils at the site consist of windblown silts and sands to a thickness of approximately three feet. This is underlain by calcified silt to a depth of approximately 35 feet as observed at the mallee pits. The nearest surface water is the intermittent stream referred to as the Midland Draw six miles to the east. The gradient to Midland Draw is 0 to 2% with no observed drainage ways. The uppermost aquifer is the Ogallala with static water levels of 35 feet below grade.

Yellow stains were noted on soil near the northwest corner of the cement covered pit and a sample was collected from this soil (SSF-004). In addition, a standing water sample (SSF-005) was collected from this area. At the request of the TWC, these samples as well as a background sample from the property (SSF-005) were not submitted for analysis.

The water well at the B&W site is located near the northwest corner of the building (see Figure 1). A water holding tank, connected to the well with a PVC intake pipe, is located inside the building. The well has a below grade completion (see Figure 2, photos 3 and 4). The sanitary seal on top of the well was observed to have a 3/4 inch gap between the well casing and the intake pipe providing an avenue for run-on to enter the well.



DISCOVERY
DRILLING
MUD

AMPAC PLUMBING
AND SUPPLY

CENTRAL
TEXAS
IRON
WORKS

HOLMES
ENGINEERING
INC.

ROSE
& SONS
INC.

TEXAS
PLASTICS
(Inactive)

DOWELL
SCHLUMBERGER

FRANCIS AVENUE

A&W SERVICES
AND
EQUIPMENT

GEBHART
AND BOYS

CARRIER AIR
CONDITIONING
(Sales)

GREEN
PAPER
PRODUCTS
PAINTING CO.

BERKAMP
SUPPLY
(Operating)

EVANS AVENUE

OPEN
FIELD

LEASE
WAREHOUSE
(Empty)

SOUTH INDUSTRIAL LOOP

NO. 420 2000
NO.
(Address)

NO. 420
AIR MOVING
AND STORAGE
(Operating)

NO. 420
RCC WAREHOUSE
(Operating)

NO. 420
B & W CONSTRUCTION
(Address)

B & W
BUILDING

NOT TO SCALE

BUSINESS IN B & W
BUILDING AREA

A field screen test of the soils around the well tested positive for chromium. However, a sample of the soil submitted to the laboratory (SSF-008) did not show detectable levels of E.P. Toxic chromium. A ground water sample could not be obtained directly from the well because there was no electricity at the site to power the well pump. Instead, a sample was collected from stored water in the holding tank. Prior to collecting the sample, water was drained from the tank for five minutes. The sample was collected from an outside faucet next to the well head. This water sample (SSF-007) was filtered in the laboratory and did not contain detectable levels of E.P. Toxic metals series.

All samples were labeled, placed into airtight bags and preserved as necessary until delivery to Southwestern Laboratories, accompanied by a completed Chain of Custody Form. In order to determine the presence of hazardous waste on-site, waste samples were collected and screening tests were performed according to the sampling plan approved by TWC. Additional information concerning the facility and the JN inspection is contained in Table 1, TWC Site Inspection Report and Attachment A, Data Collection Guideline. The analytical results of the samples collected during the site inspection are included in Attachment B, Laboratory Data Sheets and are discussed in the following Section III, Data Summary. The location of the site with respect to regional features is shown in Attachment C, County Map and in Attachment D, USGS Map.

FIGURE 2
SITE PHOTOGRAPHS

Note: Photographs have been renumbered for clarity in this report.
Numbers in parenthesis refer to the photograph number on a
particular roll of film and as described in JN field notes.



Photo #1 (23)

B & W Welding and Construction
Main entrance on west side.

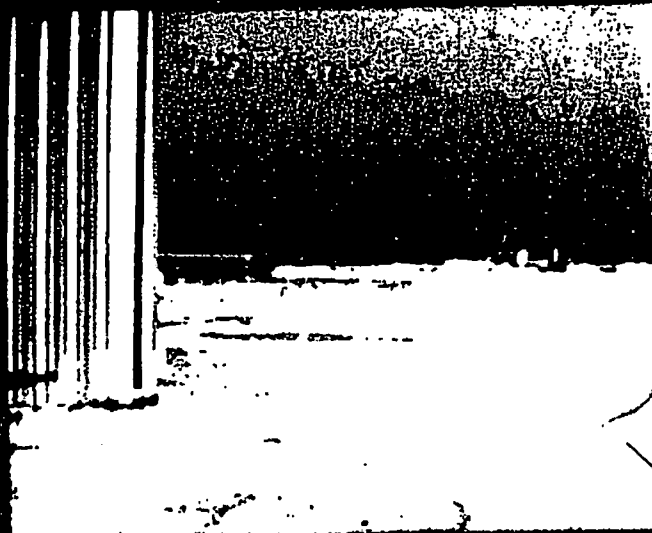


Photo #2 (3)

B & W Welding and Construction
Storage yard in back of building.
(West looking east)

Handwritten:
B&W Welding-Construct



Photo #3 (24)

B & W Welding and Construction
Well head on north side of building
(On-site public supply well)

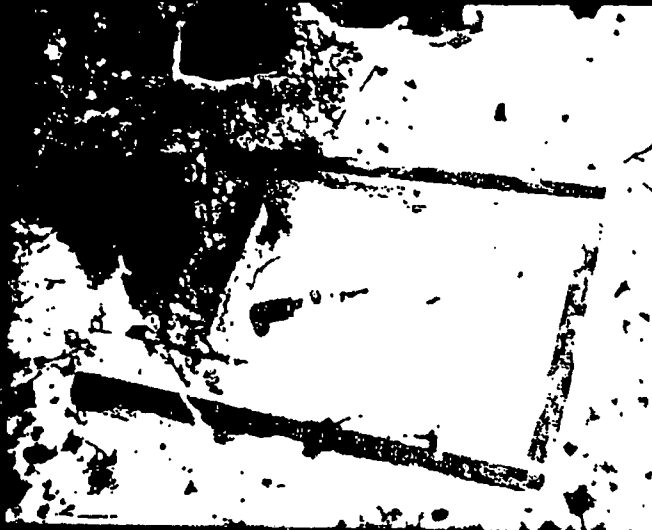


Photo #4 (3)

B & W Welding and construction
View of well head on north side of building
PVC pipe goes to pressure tank.

Handwritten signature or initials



Photo 45 (21)

B & W Welding and Construction
 North caliche quarry on adjacent property.
 B & W building is in upper right corner.
 East looking west.



Photo 46 (17)

B & W Welding and Construction
 South caliche quarry on adjacent property. East looking west.

Table 1
TWC Site Inspection Form
Residential Well Form

JONES & NEUSE

1/1/88

**State Superfund
Inspection Report****District**

10

Inspection Date

3/17/87

CERLIST**Registration #****District Contact**

Bill Lockey

Abandoned?

Yes

EPA Id #**I. SITE IDENTIFICATION****A. Site Name**

Bond Welding and Construction

B. Street (or other identifier)

#3 East Industrial Loop

C. City

Midland

D. State

Texas

E. Zip Code**F. County**

Midland

G. Site Contact Information**1. Name**

Jimmy Tedford (FDIC)

2. Telephone Number

1-800-592-4023

3. Street

P.O. Box 3148

4. City

Midland

5. State

Texas

6. Zip Code

79702

H. Land Owner Information**1. Name**

Same

2. Telephone Number**3. Street****4. City****5. State****6. Zip Code****I. Other****1. Name****2. Relationship****3. Title****4. Street****5. City****6. State****7. Zip Code****II. INSPECTION INFORMATION****A. Preparer Information****1. Name**

Robert L. Sherrill

2. Title

Project Team Leader

3. Street

2720 Bee Cave Road

4. City

Austin

5. State

Texas

6. Zip Code

78746

7. Organization

Jones and Nouse, Inc.

8. Telephone No. (area code)

512/327-9840

B. Inspection Participants**1. Name**

Robert L. Sherrill

2. Organization

Jones and Nouse, Inc.

3. Telephone No.

512/327-9840

Miriam L. Renkin

Jones and Nouse, Inc.

512/327-9840

Katherine Arthur

Texas Water Commission

512/463-5605

C. Site Representatives Interviewed (corp. officials, wkrs., residents)**1. Name**

Bill Lockey

2. Organization

Texas Water Commission

3. Telephone No.

Matt Tokheim

Texas Water Commission

35'

Depth (in feet) to uppermost aquifer - measured vertically from the lowest point of the hazardous substances to the highest seasonal level of the saturated zone of the aquifer of concern.

0

Depth (in feet) from the ground surface to the lowest point of waste disposal/storage.

D

Physical State - the state of the hazardous substance at the time of disposal.

- a. Solid, consolidated or stabilized
- b. Solid, unconsolidated or unstabilized
- c. Powder or fine material
- d. Liquid sludge or gas
- e. Unknown - comments _____

C-4

Containment - See Ground Water Chart

Unknown

Hazardous Waste Quantity - Quantity of hazardous substances deposited at a site except when completely contained. Do not include amounts of contaminated soil or water; in such cases the amount of contaminating substance may be estimated.

Basis of estimating and/or computing waste quantity:

Location of nearest well drawing from the uppermost aquifer or building not served by a public water supply:
Well On Site

Flat

Average Slope of facility in percent.

Name/description of nearest downslope surface water:

Midland Draw - Intermittent Water Course

0.25

Average slope of terrain between facility and above-cited surface water body in percent.

C-4

Containment - See Surface Water Chart.

No

Is there tidal influence?

Circle appropriate land use, describe and designate location in relation to facility.

None apparent.

Coastal Wetland
Fresh-water Land
Critical Habitat
National Wildlife Refuge

Comments:

Weather Conditions: Mid 60's, Partly Cloudy, 10-20 mph, wind from the west

Noticeable Odors? Air Monitoring Conducted?

No

No

Security: locked fences surrounding site

ADDENDUM TO TABLE 1
RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code.

J.D. Weaver

SNC 26177

Midland, TX

915/563-4450

2. Date well was dug Unknown

3. Depth of well ≈60'

4. Depth to static water Unknown

5. Is the well cased? Yes X No

If so, to what depth? Unknown

What type of casing is used? PTC

6. Is well screened? Yes No Unknown

7. How much is the well pumped? (Only for residential use or for use in watering livestock?) Daily for drinking water

8. Any other pertinent information?

SECTION III
DATA SUMMARY

JONES & REUSE

10/1/83

III. DATA SUMMARY

Analytical Data

During the site inspection six samples were collected:

- SSF-004 Stain Soil in Pit No. 2 (not analyzed)
- SSF-005 Background Soil (not analyzed)
- SSF-006 Surface Water in Pit No. 2 (not analyzed)
- SSF-007 On-site Water Well
- SSF-008 Soil Over On-Site Wellhead
- SSF-009 Weaver Trucking Water Well (not analyzed)

At the request of TWC, only two of these six samples were analyzed (SSF-007 and SSF-008). The laboratory data, tabulated in Table 2, shows that neither sample contained E.P. Toxic concentrations of heavy metals. The samples collected were properly preserved until delivery to Southwestern Laboratories. Analysis was performed within the holding time for the parameters requested. Analysis of the water sample (SSF-007) involved filtration of the sample. Thus, the data represents the total soluble fraction.

Geological Data

Although not required by contract, a search of water well records in the area was conducted in conjunction with the site investigation. It appears that all wells in the area produce from the lower Ogallala Aquifer. Static water levels of about 35 feet below the ground surface have been recorded from wells in the immediate site area. There are 740 water wells within a three mile radius of the site of which 667 are domestic use wells (closest being 45-08-1cc 667 feet from the site), 28 industrial use wells (closest being 45-08-1bb 3833 feet from the site), 24 public supply wells (closest being 45-08-1ff 7,000 feet from the site).

Table 2
Summary of Laboratory Analysis

(ppm - E.P. Toxic)

<u>Metal</u>	<u>SSF-007</u>	<u>SSF-008</u>	<u>Criteria</u>
Arsenic	<0.01	0.03	5.0
Barium	<0.50	0.95	100.0
Cadmium	<0.05	<0.02	1.0
Chromium	<0.10	<0.10	5.0
Lead	<0.10	<0.10	5.0
Mercury	<0.005	<0.005	0.2
Selenium	<0.01	<0.01	1.0
Silver	<0.05	<0.05	5.0

ATTACHMENT A
DATA COLLECTION GUIDELINE

JONES & NEUSE

DATA COLLECTION GUIDELINE

JN Submittal Date _____

TWC Approval Date _____

Site B & W Building (#3 Industrial Loop) - Midland, Texas

Team Leader Robert L. Sherrill

Team Member Miriam Renkin

TWC Contacts Kate Arthur 512/592-4033

Site Contacts _____

WASTE Type Anticipated Soil Contamination

Volume _____

Samples Anticipated E.P. Tox Chrome

Screening Analysis Field Screen Chromium

Comments _____

SURFACE WATER Availability None anticipated

Samples _____

Comments _____

GROUNDWATER Availability 1 well on-site, 1 off-site

Samples Anticipated 3 Chromium

Screening Analysis _____

Comments _____

SURFACE SOIL Visible Stains Anticipated None

Soil Gas Sampling None

DATA COLLECTION GUIDELINE

(continued)

AIR Release Anticipated None

COMMENTS Site has been extensively studied by District 10 personnel

and no evidence of soil contamination was found. Ground-

water contamination 59 2.5 ppm CrP has been found.

SAMPLE DEVIATIONS NO X YES

(Explanation Attached; See Attached Map)

ADDENDUM TO ATTACHMENT A
DATA COLLECTION GUIDELINE

Sampling Deviations at B&W Welding and Construction

Waste: No deviation

Surface Water: One sample taken in ponded water in Pit No. 2 due to proximity to yellow stain. At the request of the TWC, this sample was not analyzed.

Groundwater: Only one off-site well was sampled. At the request of the TWC, this sample was not analyzed.

Surface Soil: One sample taken from visible stain in Pit No. 2. At the request of the TWC, this sample was not analyzed.

Air: No deviation

ATTACHMENT B
LABORATORY DATA SHEETS

JONES & NEUSE

10/1/98



SOUTHWESTERN LABORATORIES



Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

222 Calhoun St. • P.O. Box 6728 Houston, Texas 77248 • 713 862 9181

May 27, 1987

Re: State Superfund Project #117202
TWC Contract #14-70020
Analytical Reports
(SwL Lab No. 87-563)

JONES AND NEUSE, INC.
2720 Bee Caves Road
Austin, Texas 78746

Attention: Mr. Michael Dick

Dear Mike:

Enclosed please find the analytical reports for the following site:

B & W Welding & Construction, #3 Industrial Coop.
Midland, Texas

We have also submitted the QA data, Chain of Custody forms, and Laboratory Request forms with the analytical report.

The QA review of the report reveals the following:

- the method of standard additions was used for metals analysis on all EP Toxicity samples.
- all data quality objectives were met.

Please call if you have any questions.

Sincerely,

SOUTHWESTERN LABORATORIES, INC.

Russell J. DiRaimo, P.E.
Manager
Environmental Engineering Service
QA/QC Officer

RJD:pm

75th
ANNIVERSARY

HOUSTON • DALLAS • AUSTIN • BEAUMONT • CONROE • GALVESTON COUNTY • FRO GRANGE VALLEY • ALEXANDRIA
SAN ANTONIO • FORT WORTH • LEEVILLE • MIDLAND • NOVOCE • SHREVEPORT • TENNESSEE • SHERMAN



SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services
222 Cavalcade St. • PO Box 8768, Houston, Texas 77245 • 713 632-3151

File No. 2-4724-1

Report No. 87-563 (1-6)

Report Date 5/11/87

Client: Jones & Neuse, Inc.
2720 Bee Caves Road
Austin, Texas 78746

Project: Jones & Neuse SSF Project #117202
TWC Contract #14-70020

Facility: B & W Welding & Construction
#3 Industrial Coop.
Midland, Texas

Date Sampled 3/17/87 Sampled by Robert Sherrill

Sample Type water, soil, waste Transported by Trailways

P.O. # _____ Date Received 3/25/87

Lab No.	Sample Identification	Analysis
563-1	SSF004 Stain in Pit	Hold
563-2	SSF005 Background soil	Hold
563-3	SSF006 Surface water in Pit	Hold
563-4	SSF007 B & W Well	EP Tox Metals
563-5	SSF008 Soil over wellhead	EP Tox Metals
563-6	SSF009 Weaver Trucking Well	Hold

Technician

Copies:

pm

Reviewed by:

Russell J. DiRaimo, P.E., QA
Environmental Engineering Serv.

Mark Tipton
Analytical Lab Supervisor

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and inspected, and are not representative of the quality of goods, work, service, or other products.

SOUTHWESTERN LABORATORIES

Client: Jones & Neuse, Inc.

Sample I.D. SSF007

File No.: 2-4724-03

Report No.: 87-563-4

Report Date: 5/11/87

EP TOXICITY

Date Sampled: 3/17/87

Date Received: 3/25/87

Date Extracted: NA

<u>Contaminant</u>	<u>Measured Concentration, mg/l</u>	<u>Maximum Allowable Concentration, mg/l</u>	<u>Date Analyzed</u>
Arsenic	<0.01	5.0	4/8/87
Barium	<0.50	100.0	4/4/87
Cadmium	<0.05	1.0	4/3/87
Chromium	<0.10	5.0	4/3/87
Lead	<0.10	5.0	4/3/87
Mercury	<0.005	0.2	4/8/87
Selenium	<0.01	1.0	4/8/87
Silver	<0.05	5.0	4/3/87

SOUTHWESTERN LABORATORIES

Client: Jones & Neuse, Inc.

Sample I.D. SSF008

File No.: 2-4724-03

Report No.: 87-563-5

Report Date: 5/11/87

EP TOXICITY

Date Sampled: 3/17/87 Date Received: 3/25/87
Date Extracted: 4/2/87 Date Analyzed:

<u>Contaminant</u>	<u>Measured Concentration, mg/l</u>	<u>Maximum Allowable Concentration, mg/l</u>	<u>Date Analyze</u>
Arsenic	0.03	5.0	4/6/87
Barium	0.95	100.0	4/6/87
Cadmium	<0.02	1.0	4/7/87
Chromium	<0.10	5.0	4/7/87
Lead	<0.10	5.0	4/7/87
Mercury	<0.005	0.2	4/6/87
Selenium	<0.01	1.0	4/8/87
Silver	<0.05	5.0	4/7/87

CHAIN OF CUSTODY RECORD

Sample Location

Sample Collector

CLIENT: Texas Water Commission

Robert Sherrill

FACILITY

LOCATION: Brow Welding and Construction

#3 Industrial Loop

Midland, TX

FIELD INFORMATION:

Sample Location	Sample Type	Date	Time	Sampler	Analysis Requested
SSF 004 Rain in P.T.	soil-waste	3/17/87	1045 hr	RS	Held
SSF 005 Background	soil	3/17/87	1030 hr	RS	Held
SSF 006 Rainwater in P.T.	water	3/17/87	1050 hr	RS	Held
SSF 007 Brow well	water	3/17/87	1130 hr	RS	EP for metals
SSF 008 soil over wellhead	soil	3/17/87	1130 hr	RS	EP for metals
SSF 009 over trucking well	water	3/17/87	1345 hr	RS	Held

CHAIN OF POSSESSION

Relinquished by:

Received by:

Date

Time

Robert Sherrill

William R. Rabin

3/17/87

2:00

William Rabin

Tommy Mark Hinkley

3/17/87

1:15pm

William Rabin

William Rabin

3/17/87

3:00

Section No. 6
Revision No. 1
Date 2/2/87
Page 40 of 44

SUBMITTER: Texas Water Commission

DATE: 3/17/87

PHONE: (512)-327-9540

REQUESTOR: Robert S. Smith, Texas A&M REQUESTED DATE

PROJECT #: 1172 CL

OF COMPLETION: _____

SAMPLE TYPE: Soil - waste

(industrial waste, groundwater, soil, solid waste, etc.)

REQUIRED ANALYSES:

E.P. Toxic Metals - HOLD

NOTES: SSF CC-4

Remnant yellow stain in south pit at B&W site.

FIGURE C-3
LABORATORY ANALYSIS REQUEST

1/1/87

Section No. 6
Revision No. 1
Date 2/2/87
Page 40 of 44

SUBMITTER: Texas Water Commission

DATE: 3/17/87

PHONE: (512)-327-9510

REQUESTOR: Robert Shorill, Texas Water

REQUESTED DATE

PROJECT #: 1172 C2

OF COMPLETION: _____

SAMPLE TYPE: Soil

(industrial waste, groundwater, soil, solid waste, etc.)

REQUIRED ANALYSES:

For Toxic Metals HCLD

NOTES:

SSF C05 Background Soil Br. Site collected
South of pits, in field between pits and T-30

FIGURE 6-3
LABORATORY ANALYSIS REQUEST

Section No. 6
Revision No. 1
Date 2/2/87
Page 40 of 43

SUBMITTER: Texas Water Commission

DATE: 3/17/87

PHONE: (612)-337-9540

REQUESTOR: Robert Sherrell, Texas A&M REQUESTED DATE

PROJECT #: 1172 C2 OF COMPLETION: _____

SAMPLE TYPE: Surface water
(industrial waste, groundwater, soil, solid waste, etc.)

REQUIRED ANALYSES:

1 HOLD

NOTES:

SSF C06: Surface water in south pit near Am
unloading site. Sample collected near yellow stain
on cement bank.

FIGURE 6-3
LABORATORY ANALYSIS REQUEST

Section No. 6

Revision No. 1

Date 2/2/87

Page 40 of 43

SUBMITTER: Texas Water Commission

DATE: 3/17/87

PHONE: (512)-327-2811

REQUESTOR: Robert Sherrill, Texas and L...

REQUESTED DATE

PROJECT #: 1472-02

OF COMPLETION: _____

SAMPLE TYPE: ground water

(industrial waste, groundwater, soil, solid waste, etc.)

REQUIRED ANALYSES:

E.P. Toxic Metals

NOTES:

SSE CC 7: well water from spigot on north
side of G-10 Building

FIGURE 6-3
LABORATORY ANALYSIS REQUEST

Section No. 6
Revision No. 1
Date 2/2/87
Page 40 of 44

SUBMITTER: Texas Water Commission

DATE: 3/17/87

PHONE: (512)-327-2347

REQUESTOR: Robert Sherry, Jr., and REQUESTED DATE

PROJECT #: 117202

OF COMPLETION: _____

SAMPLE TYPE: Soil

(industrial waste, groundwater, soil, solid waste, etc.)

REQUIRED ANALYSES:

E.P. Toxic Metals

NOTES:

SSF 003 Soil over well at north of Bldg
Building

FIGURE 8-3
LABORATORY ANALYSIS REQUEST

Section No. 6
Revision No. 1
Date 2/2/87
Page 40 of 44

SUBMITTER: Texas Water Commission

DATE: 2/17/87

PHONE: (612) 327-3510

REQUESTOR: Robert Shumill, Tarrant County REQUESTED DATE

PROJECT #: 1172 C2 OF COMPLETION: _____

SAMPLE TYPE: Ground water

(industrial waste, groundwater, soil, solid waste, etc.)

REQUIRED ANALYSES:

SP-1000-10000 HOLD

NOTES:

SSF C02 UFAIR Tackling (C02) S02A (C02) (C02)
CP B-60 S02 ADDRESS 202

FIGURE 8-3
LABORATORY ANALYSIS REQUEST

ACCURACY AND PRECISION TABULATION

METHOD OF ANALYSTS

DATE LAST UPDATED

MEAN RECOVERY (\bar{r})

MEAN RECOVERY (%)

STANDARD DEVIATION(S)

• LOWER CONFIDENCE LIMIT (LCL)

UPPER CONFIDENCE LIMIT (UCL)

DATE	ANALYST	SAMPLE ID OR STANDARD	BACKGROUND CONC.	DUPLICATE CONC.	± DIFF.	SPIKED CONC. OR STANDARD CONC.	RECOVERED CONC.	% PERCENT RECOVERED
5-13-57	GUM	112				100	101	101
5-13-57	GUM	772	10.85	10.85		10.88	10.86	92
5-13-57	GUM	1250	10.85	10.85		—	—	—
5-13-57	GUM	767	10.85	10.85		0.55	0.54	93
5-13-57	GUM	754	10.85	10.85		0.55	0.46	82
5-13-57	GUM	753-21	10.85	10.85		0.55	0.51	92
5-13-57	GUM	1250						
5-13-57	GUM	772	10.85	10.85				

-p = 100 $\frac{\text{Observed}}{\text{Known}}$ for Standards

$$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spike}}$$

25

ACCURACY AND PRECISION TABULATION

METHOD OF ANALYSIS

MEAN RECOVERY (\bar{x})

MEAN RECOVERY (\bar{x})

•• LOWER CONFIDENCE LIMIT (LCL)

•• UPPER CONFIDENCE LIMIT (UCL)

DATE	ANALYST	SAMPLE ID OR STANDARD	BACKGROUND CONC.	DUPLICATE CONC.	G.M. % DIFF.	SPIKED CONC. OR STANDARD CONC.	RECOVERED CONC.	% PERCENT RECOVERY
5-21-77	GAH	137-4	11.50	—		12.0	0.58	1.1
5-21-77	GAH	137-5	11.60	11.60	0%	12.0	0.52	1.1
5-21-77	GAH	137-6	11.2	—		12.0	0.50	1.1
5-21-77	GAH	137-7	11.0	—		12.0	0.45	1.1
5-21-77	GAH	137-8	11.5	—		12.0	0.58	1.1
5-21-77	GAH	137-9	11.5	—		12.0	0.58	1.1
5-21-77	GAH	137-10	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-11	11.05	—		12.0	0.50	1.1
5-21-77	GAH	137-12	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-13	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-14	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-15	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-16	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-17	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-18	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-19	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-20	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-21	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-22	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-23	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-24	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-25	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-26	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-27	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-28	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-29	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-30	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-31	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-32	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-33	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-34	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-35	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-36	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-37	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-38	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-39	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-40	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-41	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-42	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-43	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-44	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-45	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-46	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-47	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-48	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-49	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-50	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-51	11.02	—		12.0	0.50	1.1
5-21-77	GAH	137-52	11.02	—		12.0	0.50	1.1

$\%P = 100 \frac{\text{Observed}}{\text{Known}}$ for Standards

$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spine}}$ for Sample Spikes

• 1 • 25

ACCURACY AND PRECISION TABULATION

ANALYTE

METHOD OF ANALYSIS

DATE LAST UPDATED

MEAN RECOVERY (\bar{x})

STANDARD DEVIATION(S)

**LOWER CONFIDENCE LIMIT (LCL)

•• UPPER CONFIDENCE LIMIT (UCL)

DATE	ANALYST	SAMPLE ID OR STANDARD	BACKGROUND CONC.	DUPLICATE CONC.	DIFF.	SPIKED CONC. OR STANDARD CONC.	RECOVERED CONC.	% PERCENT RECOVERY
6-21-72	W.M.	100-1031	100-1031	100-1031	✓	100-1031	100-1031	100
6-21-72	W.M.	100-1032	100-1032	100-1032	✓	100-1032	100-1032	100
6-21-72	W.M.	100-1033	100-1033	100-1033	✓	100-1033	100-1033	100
6-21-72	W.M.	100-1034	100-1034	100-1034	✓	100-1034	100-1034	100
6-21-72	W.M.	100-1035	100-1035	100-1035	✓	100-1035	100-1035	100
6-21-72	W.M.	100-1036	100-1036	100-1036	✓	100-1036	100-1036	100
6-21-72	W.M.	100-1037	100-1037	100-1037	✓	100-1037	100-1037	100
6-21-72	W.M.	100-1038	100-1038	100-1038	✓	100-1038	100-1038	100
6-21-72	W.M.	100-1039	100-1039	100-1039	✓	100-1039	100-1039	100
6-21-72	W.M.	100-1040	100-1040	100-1040	✓	100-1040	100-1040	100
6-21-72	W.M.	100-1041	100-1041	100-1041	✓	100-1041	100-1041	100
6-21-72	W.M.	100-1042	100-1042	100-1042	✓	100-1042	100-1042	100
6-21-72	W.M.	100-1043	100-1043	100-1043	✓	100-1043	100-1043	100
6-21-72	W.M.	100-1044	100-1044	100-1044	✓	100-1044	100-1044	100
6-21-72	W.M.	100-1045	100-1045	100-1045	✓	100-1045	100-1045	100
6-21-72	W.M.	100-1046	100-1046	100-1046	✓	100-1046	100-1046	100
6-21-72	W.M.	100-1047	100-1047	100-1047	✓	100-1047	100-1047	100
6-21-72	W.M.	100-1048	100-1048	100-1048	✓	100-1048	100-1048	100
6-21-72	W.M.	100-1049	100-1049	100-1049	✓	100-1049	100-1049	100
6-21-72	W.M.	100-1050	100-1050	100-1050	✓	100-1050	100-1050	100
6-21-72	W.M.	100-1051	100-1051	100-1051	✓	100-1051	100-1051	100
6-21-72	W.M.	100-1052	100-1052	100-1052	✓	100-1052	100-1052	100
6-21-72	W.M.	100-1053	100-1053	100-1053	✓	100-1053	100-1053	100
6-21-72	W.M.	100-1054	100-1054	100-1054	✓	100-1054	100-1054	100
6-21-72	W.M.	100-1055	100-1055	100-1055	✓	100-1055	100-1055	100
6-21-72	W.M.	100-1056	100-1056	100-1056	✓	100-1056	100-1056	100
6-21-72	W.M.	100-1057	100-1057	100-1057	✓	100-1057	100-1057	100
6-21-72	W.M.	100-1058	100-1058	100-1058	✓	100-1058	100-1058	100
6-21-72	W.M.	100-1059	100-1059	100-1059	✓	100-1059	100-1059	100
6-21-72	W.M.	100-1060	100-1060	100-1060	✓	100-1060	100-1060	100
6-21-72	W.M.	100-1061	100-1061	100-1061	✓	100-1061	100-1061	100
6-21-72	W.M.	100-1062	100-1062	100-1062	✓	100-1062	100-1062	100
6-21-72	W.M.	100-1063	100-1063	100-1063	✓	100-1063	100-1063	100
6-21-72	W.M.	100-1064	100-1064	100-1064	✓	100-1064	100-1064	100
6-21-72	W.M.	100-1065	100-1065	100-1065	✓	100-1065	100-1065	100
6-21-72	W.M.	100-1066	100-1066	100-1066	✓	100-1066	100-1066	100
6-21-72	W.M.	100-1067	100-1067	100-1067	✓	100-1067	100-1067	100
6-21-72	W.M.	100-1068	100-1068	100-1068	✓	100-1068	100-1068	100
6-21-72	W.M.	100-1069	100-1069	100-1069	✓	100-1069	100-1069	100
6-21-72	W.M.	100-1070	100-1070	100-1070	✓	100-1070	100-1070	100
6-21-72	W.M.	100-1071	100-1071	100-1071	✓	100-1071	100-1071	100
6-21-72	W.M.	100-1072	100-1072	100-1072	✓	100-1072	100-1072	100
6-21-72	W.M.	100-1073	100-1073	100-1073	✓	100-1073	100-1073	100
6-21-72	W.M.	100-1074	100-1074	100-1074	✓	100-1074	100-1074	100
6-21-72	W.M.	100-1075	100-1075	100-1075	✓	100-1075	100-1075	100
6-21-72	W.M.	100-1076	100-1076	100-1076	✓	100-1076	100-1076	100
6-21-72	W.M.	100-1077	100-1077	100-1077	✓	100-1077	100-1077	100
6-21-72	W.M.	100-1078	100-1078	100-1078	✓	100-1078	100-1078	100
6-21-72	W.M.	100-1079	100-1079	100-1079	✓	100-1079	100-1079	100
6-21-72	W.M.	100-1080	100-1080	100-1080	✓	100-1080	100-1080	100
6-21-72	W.M.	100-1081	100-1081	100-1081	✓	100-1081	100-1081	100
6-21-72	W.M.	100-1082	100-1082	100-1082	✓	100-1082	100-1082	100
6-21-72	W.M.	100-1083	100-1083	100-1083	✓	100-1083	100-1083	100
6-21-72	W.M.	100-1084	100-1084	100-1084	✓	100-1084	100-1084	100
6-21-72	W.M.	100-1085	100-1085	100-1085	✓	100-1085	100-1085	100
6-21-72	W.M.	100-1086	100-1086	100-1086	✓	100-1086	100-1086	100
6-21-72	W.M.	100-1087	100-1087	100-1087	✓	100-1087	100-1087	100
6-21-72	W.M.	100-1088	100-1088	100-1088	✓	100-1088	100-1088	100
6-21-72	W.M.	100-1089	100-1089	100-1089	✓	100-1089	100-1089	100
6-21-72	W.M.	100-1090	100-1090	100-1090	✓	100-1090	100-1090	100
6-21-72	W.M.	100-1091	100-1091	100-1091	✓	100-1091	100-1091	100
6-21-72	W.M.	100-1092	100-1092	100-1092	✓	100-1092	100-1092	100
6-21-72	W.M.	100-1093	100-1093	100-1093	✓	100-1093	100-1093	100
6-21-72	W.M.	100-1094	100-1094	100-1094	✓	100-1094	100-1094	100
6-21-72	W.M.	100-1095	100-1095	100-1095	✓	100-1095	100-1095	100
6-21-72	W.M.	100-1096	100-1096	100-1096	✓	100-1096	100-1096	100
6-21-72	W.M.	100-1097	100-1097	100-1097	✓	100-1097	100-1097	100
6-21-72	W.M.	100-1098	100-1098	100-1098	✓	100-1098	100-1098	100
6-21-72	W.M.	100-1099	100-1099	100-1099	✓	100-1099	100-1099	100
6-21-72	W.M.	100-1100	100-1100	100-1100	✓	100-1100	100-1100	100
6-21-72	W.M.	100-1101	100-1101	100-1101	✓	100-1101	100-1101	100
6-21-72	W.M.	100-1102	100-1102	100-1102	✓	100-1102	100-1102	100
6-21-72	W.M.	100-1103	100-1103	100-1103	✓	100-1103	100-1103	100
6-21-72	W.M.	100-1104	100-1104	100-1104	✓	100-1104	100-1104	100
6-21-72	W.M.	100-1105	100-1105	100-1105	✓	100-1105	100-1105	100
6-21-72	W.M.	100-1106	100-1106	100-1106	✓	100-1106	100-1106	100
6-21-72	W.M.	100-1107	100-1107	100-1107	✓	100-1107	100-1107	100
6-21-72	W.M.	100-1108	100-1108	100-1108	✓	100-1108	100-1108	100
6-21-72	W.M.	100-1109	100-1109	100-1109	✓	100-1109	100-1109	100
6-21-72	W.M.	100-1110	100-1110	100-1110	✓	100-1110	100-1110	100
6-21-72	W.M.	100-1111	100-1111	100-1111	✓	100-1111	100-1111	100
6-21-72	W.M.	100-1112	100-1112	100-1112	✓	100-1112	100-1112	100
6-21-72	W.M.	100-1113	100-1113	100-1113	✓	100-1113	100-1113	100
6-21-72	W.M.	100-1114	100-1114	100-1114	✓	100-1114	100-1114	100
6-21-72	W.M.	100-1115	100-1115	100-1115	✓	100-1115	100-1115	100
6-21-72	W.M.	100-1116	100-1116	100-1116	✓	100-1116	100-1116	100
6-21-72	W.M.	100-1117	100-1117	100-1117	✓	100-1117	100-1117	100
6-21-72	W.M.	100-1118	100-1118	100-1118	✓	100-1118	100-1118	100
6-21-72	W.M.	100-1119	100-1119	100-1119	✓	100-1119	100-1119	100
6-21-72	W.M.	100-1120	100-1120	100-1120	✓	100-1120	100-1120	100
6-21-72	W.M.	100-1121	100-1121	100-1121	✓	100-1121	100-1121	100
6-21-72	W.M.	100-1122	100-1122	100-1122	✓	100-1122	100-1122	100
6-21-72	W.M.	100-1123	100-1123	100-1123	✓	100-1123	100-1123	100
6-21-72	W.M.	100-1124	100-1124	100-1124	✓	100-1124	100-1124	100
6-21-72	W.M.	100-1125	100-1125	100-1125	✓	100-1125	100-1125	100
6-21-72	W.M.	100-1126	100-1126	100-1126	✓	100-1126	100-1126	100
6-21-72	W.M.	100-1127	100-1127	100-1127	✓	100-1127	100-1127	100
6-21-72	W.M.	100-1128	100-1128	100-1128	✓	100-1128	100-1128	100
6-21-72	W.M.	100-1129	100-1129	100-1129	✓	100-1129	100-1129	100
6-21-72	W.M.	100-1130	100-1130	100-1130	✓	100-1130	100-1130	100
6-21-72	W.M.	100-1131	100-1131	100-1131	✓	100-1131	100-1131	100
6-21-72	W.M.	100-1132	100-1132	100-1132	✓	100-1132	100-1132	100
6-21-72	W.M.	100-1133	100-1133	100-1133	✓	100-1133	100-1133	100
6-21-72	W.M.	100-1134	100-1134	100-1134	✓	100-1134	100-1134	100
6-21-72	W.M.	100-1135	100-1135	100-1135	✓	100-1135	100-1135	100
6-21-72	W.M.	100-1136	100-1136	100-1136	✓	100-1136	100-1136	100
6-21-72	W.M.	100-1137	100-1137	100-1137	✓	100-1137	100-1137	100
6-21-72	W.M.	100-1138	100-1138	100-1138	✓	100-1138	100-1138	100
6-21-72	W.M.	100-1139	100-1139	100-1139	✓	100-1139	100-1139	100
6-21-72	W.M.	100-1140	100-1140	100-1140	✓	100-1140	100-1140	100
6-21-72	W.M.	100-1141	100-1141	100-1141	✓	100-1141	100-1141	100
6-21-72	W.M.	100-1142	100-1142	100-1142	✓	100-1142	100-1142	100
6-21-72	W.M.	100-1143	100-1143	100-1143	✓	100-1143	100-1143	100
6-21-72	W.M.	100-1144	100-1144	100-1144	✓	100-1144	100-1144	100
6-21-72	W.M.	100-1145	100-1145	100-1145	✓	100-1145	100-1145	100
6-21-72	W.M.	100-1146	100-1146	100-1146	✓	100-1146	100-1146	100
6-21-72	W.M.	100-1147	100-1147	100-1147	✓	100-1147	100-1147	100
6-21-72	W.M.	100-1148	100-1148	100-1148	✓	100-1148	100-1148	100
6-21-72	W.M.	100-1149	100-1149	100-1149	✓	100-1149	100-1149	100
6-21-72	W.M.	100-1150	100-1150	100-1150	✓	100-1150	100-1150	100
6-21-72	W.M.	100-1151						

• P = 100 $\frac{\text{Observed}}{\text{Known}}$ for Standards

$$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spike}} \text{ for Sample Spikes}$$

• 25

**EPA
INSERTED
DOCUMENT
SEPARATOR**

ACCURACY AND PRECISION TABULATION

ANALYTE	
METHOD OF ANALYSIS	
DATE LAST UPDATED	
MEAN RECOVERY (%)	

STANDARD DEVIATION(S)	120
•• LOWER CONFIDENCE LIMIT (LCL)	375
•• UPPER CONFIDENCE LIMIT (UCL)	120

[illegible]

• $p = 100 \frac{\text{Observed}}{\text{Known}}$ for Standards

$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spike}}$ for Sample Spikes

25

ACCURACY AND PRECISION TABULATION

ANALYTE

METHOD OF ANALYSIS

DATE LAST UPDATED

MEAN RECOVERY (\bar{x})

STANDARD DEVIATION(S)

•• LOWER CONFIDENCE LIMIT (LCL)

••UPPER CONFIDENCE LIMIT (UCL)

DATE	ANALYST	SAMPLE ID OR STANDARD	BACKGROUND CONC.	DUPLICATE CONC.	net C.R. DIFF.	SPIKED CONC. OR STANDARD CONC.	RECOVERED CONC.	% PERCENT RECOVERY
5-10	TD	254-1	1.00	—		1.00	1.00	100
5-10	TD	254-1	1.00	—		1.00	1.00	100
5-10	TD	254-2	1.00	—		1.00	1.00	100
5-10	TD	254-2	1.00	—		1.00	1.00	100
5-10	TD	254-3	1.00	—		1.00	1.00	100
5-10	TD	254-3	1.00	—		1.00	1.00	100
5-10	TD	254-4	1.00	—		1.00	1.00	100
5-10	TD	254-4	1.00	—		1.00	1.00	100
5-10	TD	254-5	1.00	—		1.00	1.00	100
5-10	TD	254-5	1.00	—		1.00	1.00	100
5-10	TD	254-6	1.00	—		1.00	1.00	100
5-10	TD	254-6	1.00	—		1.00	1.00	100
5-10	TD	254-7	1.00	—		1.00	1.00	100
5-10	TD	254-7	1.00	—		1.00	1.00	100
5-10	TD	254-8	1.00	—		1.00	1.00	100
5-10	TD	254-8	1.00	—		1.00	1.00	100
5-10	TD	254-9	1.00	—		1.00	1.00	100
5-10	TD	254-9	1.00	—		1.00	1.00	100
5-10	TD	254-10	1.00	—		1.00	1.00	100
5-10	TD	254-10	1.00	—		1.00	1.00	100
5-10	TD	254-11	1.00	—		1.00	1.00	100
5-10	TD	254-11	1.00	—		1.00	1.00	100
5-10	TD	254-12	1.00	—		1.00	1.00	100
5-10	TD	254-12	1.00	—		1.00	1.00	100
5-10	TD	254-13	1.00	—		1.00	1.00	100
5-10	TD	254-13	1.00	—		1.00	1.00	100
5-10	TD	254-14	1.00	—		1.00	1.00	100
5-10	TD	254-14	1.00	—		1.00	1.00	100
5-10	TD	254-15	1.00	—		1.00	1.00	100
5-10	TD	254-15	1.00	—		1.00	1.00	100
5-10	TD	254-16	1.00	—		1.00	1.00	100
5-10	TD	254-16	1.00	—		1.00	1.00	100
5-10	TD	254-17	1.00	—		1.00	1.00	100
5-10	TD	254-17	1.00	—		1.00	1.00	100
5-10	TD	254-18	1.00	—		1.00	1.00	100
5-10	TD	254-18	1.00	—		1.00	1.00	100
5-10	TD	254-19	1.00	—		1.00	1.00	100
5-10	TD	254-19	1.00	—		1.00	1.00	100
5-10	TD	254-20	1.00	—		1.00	1.00	100
5-10	TD	254-20	1.00	—		1.00	1.00	100
5-10	TD	254-21	1.00	—		1.00	1.00	100
5-10	TD	254-21	1.00	—		1.00	1.00	100
5-10	TD	254-22	1.00	—		1.00	1.00	100
5-10	TD	254-22	1.00	—		1.00	1.00	100
5-10	TD	254-23	1.00	—		1.00	1.00	100
5-10	TD	254-23	1.00	—		1.00	1.00	100
5-10	TD	254-24	1.00	—		1.00	1.00	100
5-10	TD	254-24	1.00	—		1.00	1.00	100
5-10	TD	254-25	1.00	—		1.00	1.00	100
5-10	TD	254-25	1.00	—		1.00	1.00	100
5-10	TD	254-26	1.00	—		1.00	1.00	100
5-10	TD	254-26	1.00	—		1.00	1.00	100
5-10	TD	254-27	1.00	—		1.00	1.00	100
5-10	TD	254-27	1.00	—		1.00	1.00	100
5-10	TD	254-28	1.00	—		1.00	1.00	100
5-10	TD	254-28	1.00	—		1.00	1.00	100
5-10	TD	254-29	1.00	—		1.00	1.00	100
5-10	TD	254-29	1.00	—		1.00	1.00	100
5-10	TD	254-30	1.00	—		1.00	1.00	100
5-10	TD	254-30	1.00	—		1.00	1.00	100
5-10	TD	254-31	1.00	—		1.00	1.00	100
5-10	TD	254-31	1.00	—		1.00	1.00	100
5-10	TD	254-32	1.00	—		1.00	1.00	100
5-10	TD	254-32	1.00	—		1.00	1.00	100
5-10	TD	254-33	1.00	—		1.00	1.00	100
5-10	TD	254-33	1.00	—		1.00	1.00	100
5-10	TD	254-34	1.00	—		1.00	1.00	100
5-10	TD	254-34	1.00	—		1.00	1.00	100
5-10	TD	254-35	1.00	—		1.00	1.00	100
5-10	TD	254-35	1.00	—		1.00	1.00	100
5-10	TD	254-36	1.00	—		1.00	1.00	100
5-10	TD	254-36	1.00	—		1.00	1.00	100
5-10	TD	254-37	1.00	—		1.00	1.00	100
5-10	TD	254-37	1.00	—		1.00	1.00	100
5-10	TD	254-38	1.00	—		1.00	1.00	100
5-10	TD	254-38	1.00	—		1.00	1.00	100
5-10	TD	254-39	1.00	—		1.00	1.00	100
5-10	TD	254-39	1.00	—		1.00	1.00	100
5-10	TD	254-40	1.00	—		1.00	1.00	100
5-10	TD	254-40	1.00	—		1.00	1.00	100
5-10	TD	254-41	1.00	—		1.00	1.00	100
5-10	TD	254-41	1.00	—		1.00	1.00	100
5-10	TD	254-42	1.00	—		1.00	1.00	100
5-10	TD	254-42	1.00	—		1.00	1.00	100
5-10	TD	254-43	1.00	—		1.00	1.00	100
5-10	TD	254-43	1.00	—		1.00	1.00	100
5-10	TD	254-44	1.00	—		1.00	1.00	100
5-10	TD	254-44	1.00	—		1.00	1.00	100
5-10	TD	254-45	1.00	—		1.00	1.00	100
5-10	TD	254-45	1.00	—		1.00	1.00	100
5-10	TD	254-46	1.00	—		1.00	1.00	100
5-10	TD	254-46	1.00	—		1.00	1.00	100
5-10	TD	254-47	1.00	—		1.00	1.00	100
5-10	TD	254-47	1.00	—		1.00	1.00	100
5-10	TD	254-48	1.00	—		1.00	1.00	100
5-10	TD	254-48	1.00	—		1.00	1.00	100
5-10	TD	254-49	1.00	—		1.00	1.00	100
5-10	TD	254-49	1.00	—		1.00	1.00	100
5-10	TD	254-50	1.00	—		1.00	1.00	100
5-10	TD	254-50	1.00	—		1.00	1.00	100
5-10	TD	254-51	1.00	—		1.00	1.00	100
5-10	TD	254-51	1.00	—		1.00	1.00	100
5-10	TD	254-52	1.00	—		1.00	1.00	100
5-10	TD	254-52	1.00	—		1.00	1.00	100
5-10	TD	254-53	1.00	—		1.00	1.00	100
5-10	TD	254-53	1.00	—		1.00	1.00	100
5-10	TD	254-54	1.00	—		1.00	1.00	100
5-10	TD	254-54	1.00	—		1.00	1.00	100
5-10	TD	254-55	1.00	—		1.00	1.00	100
5-10	TD	254-55	1.00	—		1.00	1.00	100
5-10	TD	254-56	1.00	—		1.00	1.00	100
5-10	TD	254-56	1.00	—		1.00	1.00	100
5-10	TD	254-57	1.00	—		1.00	1.00	100
5-10	TD	254-57	1.00	—		1.00	1.00	100
5-10	TD	254-58	1.00	—		1.00	1.00	100
5-10	TD	254-58	1.00	—		1.00	1.00	100
5-10	TD	254-59	1.00	—		1.00	1.00	100
5-10	TD	254-59	1.00	—		1.00	1.00	100
5-10	TD	254-60	1.00	—		1.00	1.00	100
5-10	TD	254-60	1.00	—		1.00	1.00	100
5-10	TD	254-61	1.00	—		1.00	1.00	100
5-10	TD	254-61	1.00	—		1.00	1.00	100
5-10	TD	254-62	1.00	—		1.00	1.00	100
5-10	TD	254-62	1.00	—		1.00	1.00	100
5-10	TD	254-63	1.00	—		1.00	1.00	100
5-10	TD	254-63	1.00	—		1.00	1.00	100
5-10	TD	254-64	1.00	—		1.00	1.00	100
5-10	TD	254-64	1.00	—		1.00	1.00	100
5-10	TD	254-65	1.00	—		1.00	1.00	100
5-10	TD	254-65	1.00	—		1.00	1.00	100
5-10	TD	254-66	1.00	—		1.00	1.00	100
5-10	TD	254-66	1.00	—		1.00	1.00	100
5-10	TD	254-67	1.00	—		1.00	1.00	100
5-10	TD	254-67	1.00	—		1.00	1.00	100
5-10	TD	254-68	1.00	—		1.00	1.00	100
5-10	TD	254-68	1.00	—		1.00	1.00	100
5-10	TD	254-69	1.00	—		1.00	1.00	100
5-10	TD	254-69	1.00	—		1.00	1.00	100
5-10	TD	254-70	1.00	—		1.00	1.00	100
5-10	TD	254-70	1.00	—		1.00	1.00	100
5-10	TD	254-71	1.00	—		1.00	1.00	100
5-10	TD	254-71	1.00	—		1.00	1.00	100
5-10	TD	254-72	1.00	—		1.00	1.00	100
5-10	TD	254-72	1.00	—		1.00	1.00	100
5-10	TD	254-73	1.00	—		1.00	1.00	100
5-10	TD	254-73	1.00	—		1.00	1.00	100
5-10	TD	254-74	1.00	—		1.00	1.00	100
5-10	TD	254-74	1.00	—		1.00	1.00	100
5-10	TD	254-75	1.00	—		1.00	1.00	100
5-10	TD	254-75	1.00	—		1.00	1.00	100
5-10	TD	254-76	1.00	—		1.00	1.00	100
5-10	TD	254-76	1.00	—		1.00	1.00	100
5-10	TD	254-77	1.00	—		1.00	1.00	100
5-10	TD	254-77	1.00	—		1.00	1.00	100
5-10	TD	254-78	1.00	—		1.00	1.00	100
5-10	TD	254-78	1.00	—		1.00	1.00	100
5-10	TD	254-79	1.00	—		1.00	1.00	100
5-10	TD	254-79	1.00	—		1.00	1.00	100
5-10	TD	254-80	1.00	—		1.00	1.00	100
5-10	TD	254-80	1.00	—		1.00	1.00	100
5-10	TD	254-81	1.00	—		1.00	1.00	100
5-10	TD	254-81	1.00	—		1.00	1.00	100
5-10	TD	254-82	1.00	—		1.00	1.00	100
5-10	TD	254-82	1.00	—		1.00	1.0	

$\%P = 100 \frac{\text{Observed}}{\text{Known}}$ for Standards

$$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spike}} \text{ for Sample Spikes}$$

• 25

ACCURACY AND PRECISION TABULATION

ANALYTE	As
METHOD OF ANALYSIS	GC-MS
DATE LAST UPDATED	5-14-2004
MEAN RECOVERY (%)	60.00

STANDARD DEVIATION(S)	1.63
•• LOWER CONFIDENCE LIMIT (LCL)	47.6
•• UPPER CONFIDENCE LIMIT (UCL)	48.5

[illegible]

• 7 • 100 $\frac{\text{Observed}}{\text{Known}}$ for Standards

$$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spike}}$$

• 25

ACCURACY AND PRECISION TABULATION

ANALYTE 205
 METHOD OF ANALYSIS GC/MS
 DATE LAST UPDATED 12-25-04
 MEAN RECOVERY (%) 97.2

STANDARD DEVIATION(S) 5.81
 **LOWER CONFIDENCE LIMIT (LCL) 92.4
 **UPPER CONFIDENCE LIMIT (UCL) 102.0

DATE	ANALYST	SAMPLE ID OR STANDARD	BACKGROUND CONC.	DUPLICATE CONC.	DIFF.	SPIKED CONC. OR STANDARD CONC.	RECOVERED CONC.	% PERCENT RECOVERY
12/25/04	AM	205-1	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-2	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-3	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-4	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-5	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-6	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-7	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-8	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-9	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-10	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-11	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-12	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-13	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-14	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-15	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-16	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-17	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-18	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-19	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-20	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-21	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-22	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-23	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-24	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-25	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-26	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-27	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-28	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-29	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-30	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-31	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-32	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-33	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-34	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-35	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-36	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-37	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-38	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-39	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-40	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-41	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-42	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-43	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-44	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-45	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-46	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-47	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-48	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-49	10.0	10.0	0.0	10.0	9.7	97.0
12/25/04	AM	205-50	10.0	10.0	0.0	10.0	9.7	97.0

*P = 100 Observed for Standards
 Known

*P = 100 Observed - Background for Sample Spikes
 Spike

*n = 25

12/25/04

ACCURACY AND PRECISION TABULATION

ANALYTE	COF
METHOD OF ANALYSIS	ICF 3127
DATE LAST UPDATED	5-15-99
MEAN RECOVERY (%)	99.0

STANDARD DEVIATION(S) 10.1
• LOWER CONFIDENCE LIMIT (LCL) 74.4
• UPPER CONFIDENCE LIMIT (UCL) 115

DATE	ANALYST	SAMPLE ID OR STANDARD	BACKGROUND CONC.	DUPLICATE CONC.	DIFF.	SPRINKLED CONC. OR STANDARD CONC.	RECOVERED CONC.	P. PERCENT RECOVERY
4-7-72	GLM	0.75				0.75	0.75	100
		571-3	10.10	10.10	✓			
4-13-72	GLM	0.75				0.75	0.73	97
4-28-72	GLM	0.75				0.75	0.57	76
		714	10.10	10.10	✓			
4-28-72	GLM	1.25						
		250-1	10.10	10.10	✓			
5-5-72	GLM	571-3				0.55	0.55	100
		714	10.10	10.10	✓			
5-7-72	GLM	723-21	10.05	10.05	✓	0.50	0.50	100
		723-1	10.05	10.05	✓			
5-16-72	GLM	571-3				0.50	0.50	100
		723	10.10	10.10	✓			

• P = 100 $\frac{\text{Observed}}{\text{Known}}$ for Standards

$$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spine}}$$

• 25

ACCURACY AND PRECISION TABULATION

ANALYTE CO
METHOD OF ANALYSIS 3704
DATE LAST UPDATED 2-25-77
MEAN RECOVERY (%) 100

STANDARD DEVIATION(S)	403
•• LOWER CONFIDENCE LIMIT (LCL)	278
•• UPPER CONFIDENCE LIMIT (UCL)	109

[illegible]

• P = 100 $\frac{\text{Observed}}{\text{Known}}$ for Standards

100 $\frac{\text{Observed} - \text{Background}}{\text{Spine}}$ for Sample Spikes

25

ACCURACY AND PRECISION TABULATION

ANALYTE	
METHOD OF ANALYSIS	
DATE LAST UPDATED	6-10-77
MEAN RECOVERY (\bar{x})	112

STANDARD DEVIATION(S)	0.68
•• LOWER CONFIDENCE LIMIT (LCL)	72.4
•• UPPER CONFIDENCE LIMIT (UCL)	73.6

[illegible]
$$= P = 100 \frac{\text{Observed}}{\text{Known}}$$
$$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spize}} \text{ for Sample Spikes}$$

• 25

ACCURACY AND PRECISION TABULATION

ANALYTE

METHOD OF ANALYSIS

DATE LAST UPDATED

MEAN RECOVERY (\bar{x})

STANDARD DEVIATION(S)

*• LOWER CONFIDENCE LIMIT (LCL)

•• UPPER CONFIDENCE LIMIT (UCL)

DATE	ANALYST	SAMPLE ID OR STANDARD	BACKGROUND CONC.	DUPLICATE CONC.	± DIFF.	SPIRED CONC. OR STANDARD CONC.	RECOVERED CONC.	P° PERCENT RECOVERY
7-25-77	GLM	724-16	1.010	1.020	✓	1.015	1.010	99
7-25-77	GLM	724-16B	559/1.010	1.010	✓	1.025	1.027	100
7-25-77	GLM	724-16C	559/1.010	1.010	✓	1.030	1.025	99
7-25-77	GLM	724-16D	559/1.010	1.010	✓	1.035	1.025	98
7-25-77	GLM	724-16E	559/1.010	1.010	✓	1.040	1.035	99
7-25-77	GLM	724-16F	559/1.010	1.010	✓	1.045	1.035	99
7-25-77	GLM	724-16G	559/1.010	1.010	✓	1.050	1.035	99
7-25-77	GLM	724-16H	559/1.010	1.010	✓	1.055	1.035	98
7-25-77	GLM	724-16I	559/1.010	1.010	✓	1.060	1.035	98
7-25-77	GLM	724-16J	559/1.010	1.010	✓	1.065	1.035	98
7-25-77	GLM	724-16K	559/1.010	1.010	✓	1.070	1.035	98
7-25-77	GLM	724-16L	559/1.010	1.010	✓	1.075	1.035	98
7-25-77	GLM	724-16M	559/1.010	1.010	✓	1.080	1.035	98
7-25-77	GLM	724-16N	559/1.010	1.010	✓	1.085	1.035	98
7-25-77	GLM	724-16O	559/1.010	1.010	✓	1.090	1.035	98
7-25-77	GLM	724-16P	559/1.010	1.010	✓	1.095	1.035	98
7-25-77	GLM	724-16Q	559/1.010	1.010	✓	1.100	1.035	98
7-25-77	GLM	724-16R	559/1.010	1.010	✓	1.105	1.035	98
7-25-77	GLM	724-16S	559/1.010	1.010	✓	1.110	1.035	98
7-25-77	GLM	724-16T	559/1.010	1.010	✓	1.115	1.035	98
7-25-77	GLM	724-16U	559/1.010	1.010	✓	1.120	1.035	98
7-25-77	GLM	724-16V	559/1.010	1.010	✓	1.125	1.035	98
7-25-77	GLM	724-16W	559/1.010	1.010	✓	1.130	1.035	98
7-25-77	GLM	724-16X	559/1.010	1.010	✓	1.135	1.035	98
7-25-77	GLM	724-16Y	559/1.010	1.010	✓	1.140	1.035	98
7-25-77	GLM	724-16Z	559/1.010	1.010	✓	1.145	1.035	98
7-25-77	GLM	724-16A	559/1.010	1.010	✓	1.150	1.035	98
7-25-77	GLM	724-16B	559/1.010	1.010	✓	1.155	1.035	98
7-25-77	GLM	724-16C	559/1.010	1.010	✓	1.160	1.035	98
7-25-77	GLM	724-16D	559/1.010	1.010	✓	1.165	1.035	98
7-25-77	GLM	724-16E	559/1.010	1.010	✓	1.170	1.035	98
7-25-77	GLM	724-16F	559/1.010	1.010	✓	1.175	1.035	98
7-25-77	GLM	724-16G	559/1.010	1.010	✓	1.180	1.035	98
7-25-77	GLM	724-16H	559/1.010	1.010	✓	1.185	1.035	98
7-25-77	GLM	724-16I	559/1.010	1.010	✓	1.190	1.035	98
7-25-77	GLM	724-16J	559/1.010	1.010	✓	1.195	1.035	98
7-25-77	GLM	724-16K	559/1.010	1.010	✓	1.200	1.035	98
7-25-77	GLM	724-16L	559/1.010	1.010	✓	1.205	1.035	98
7-25-77	GLM	724-16M	559/1.010	1.010	✓	1.210	1.035	98
7-25-77	GLM	724-16N	559/1.010	1.010	✓	1.215	1.035	98
7-25-77	GLM	724-16O	559/1.010	1.010	✓	1.220	1.035	98
7-25-77	GLM	724-16P	559/1.010	1.010	✓	1.225	1.035	98
7-25-77	GLM	724-16Q	559/1.010	1.010	✓	1.230	1.035	98
7-25-77	GLM	724-16R	559/1.010	1.010	✓	1.235	1.035	98
7-25-77	GLM	724-16S	559/1.010	1.010	✓	1.240	1.035	98
7-25-77	GLM	724-16T	559/1.010	1.010	✓	1.245	1.035	98
7-25-77	GLM	724-16U	559/1.010	1.010	✓	1.250	1.035	98
7-25-77	GLM	724-16V	559/1.010	1.010	✓	1.255	1.035	98
7-25-77	GLM	724-16W	559/1.010	1.010	✓	1.260	1.035	98
7-25-77	GLM	724-16X	559/1.010	1.010	✓	1.265	1.035	98
7-25-77	GLM	724-16Y	559/1.010	1.010	✓	1.270	1.035	98
7-25-77	GLM	724-16Z	559/1.010	1.010	✓	1.275	1.035	98
7-25-77	GLM	724-16A	559/1.010	1.010	✓	1.280	1.035	98
7-25-77	GLM	724-16B	559/1.010	1.010	✓	1.285	1.035	98
7-25-77	GLM	724-16C	559/1.010	1.010	✓	1.290	1.035	98
7-25-77	GLM	724-16D	559/1.010	1.010	✓	1.295	1.035	98
7-25-77	GLM	724-16E	559/1.010	1.010	✓	1.300	1.035	98
7-25-77	GLM	724-16F	559/1.010	1.010	✓	1.305	1.035	98
7-25-77	GLM	724-16G	559/1.010	1.010	✓	1.310	1.035	98
7-25-77	GLM	724-16H	559/1.010	1.010	✓	1.315	1.035	98
7-25-77	GLM	724-16I	559/1.010	1.010	✓	1.320	1.035	98
7-25-77	GLM	724-16J	559/1.010	1.010	✓	1.325	1.035	98
7-25-77	GLM	724-16K	559/1.010	1.010	✓	1.330	1.035	98
7-25-77	GLM	724-16L	559/1.010	1.010	✓	1.335	1.035	98
7-25-77	GLM	724-16M	559/1.010	1.010	✓	1.340	1.035	98
7-25-77	GLM	724-16N	559/1.010	1.010	✓	1.345	1.035	98
7-25-77	GLM	724-16O	559/1.010	1.010	✓	1.350	1.035	98
7-25-77	GLM	724-16P	559/1.010	1.010	✓	1.355	1.035	98
7-25-77	GLM	724-16Q	559/1.010	1.010	✓	1.360	1.035	98
7-25-77	GLM	724-16R	559/1.010	1.010	✓	1.365	1.035	98
7-25-77	GLM	724-16S	559/1.010	1.010	✓	1.370	1.035	98
7-25-77	GLM	724-16T	559/1.010	1.010	✓	1.375	1.035	98
7-25-77	GLM	724-16U	559/1.010	1.010	✓	1.380	1.035	98
7-25-77	GLM	724-16V	559/1.010	1.010	✓	1.385	1.035	98
7-25-77	GLM	724-16W	559/1.010	1.010	✓	1.390	1.035	98
7-25-77	GLM	724-16X	559/1.010	1.010	✓	1.395	1.035	98
7-25-77	GLM	724-16Y	559/1.010	1.010	✓	1.400	1.035	98
7-25-77	GLM	724-16Z	559/1.010	1.010	✓	1.405	1.035	98
7-25-77	GLM	724-16A	559/1.010	1.010	✓	1.410	1.035	98
7-25-77	GLM	724-16B	559/1.010	1.010	✓	1.415	1.035	98
7-25-77	GLM	724-16C	559/1.010	1.010	✓	1.420	1.035	98
7-25-77	GLM	724-16D	559/1.010	1.010	✓	1.425	1.035	98
7-25-77	GLM	724-16E	559/1.010	1.010	✓	1.430	1.035	98
7-25-77	GLM	724-16F	559/1.010	1.010	✓	1.435	1.035	98
7-25-77	GLM	724-16G	559/1.010	1.010	✓	1.440	1.035	98
7-25-77	GLM	724-16H	559/1.010	1.010	✓	1.445	1.035	98
7-25-77	GLM	724-16I	559/1.010	1.010	✓	1.450	1.035	98
7-25-77	GLM	724-16J	559/1.010	1.010	✓	1.455	1.035	98
7-25-77	GLM	724-16K	559/1.010	1.010	✓	1.460	1.035	98
7-25-77	GLM	724-16L	559/1.010	1.010	✓	1.465	1.035	98
7-25-77	GLM	724-16M	559/1.010	1.010	✓	1.470	1.035	98
7-25-77	GLM	724-16N	559/1.010	1.010	✓	1.475	1.035	98
7-25-77	GLM	724-16O	559/1.010	1.010	✓	1.480	1.035	98
7-25-77	GLM	724-16P	559/1.010	1.010	✓	1.485	1.035	98
7-25-77	GLM	724-16Q	559/1.010	1.010	✓	1.490	1.035	98
7-25-77	GLM	724-16R	559/1.010	1.010	✓	1.495	1.035	98
7-25-77	GLM	724-16S	559/1.010	1.010	✓	1.500	1.035	98
7-25-77	GLM	724-16T	559/1.010	1.010	✓	1.505	1.035	98
7-25-77	GLM	724-16U	559/1.010	1.010	✓	1.510	1.035	98
7-25-77	GLM	724-16V	559/1.010	1.010	✓	1.515	1.035	98
7-25-77	GLM	724-16W	559/1.010	1.010	✓	1.520	1.035	98
7-25-77	GLM	724-16X	559/1.010	1.010	✓	1.525	1.035	98
7-25-77	GLM	724-16Y	559/1.010	1.010	✓	1.530	1.035	98
7-25-77	GLM	724-16Z	559/1.010	1.010	✓	1.535	1.035	98
7-25-77	GLM	724-16A	559/1.010	1.010	✓	1.540	1.035	98
7-25-77	GLM	724-16B	559/1.010	1.010	✓	1.545	1.035	98
7-25-77	GLM	724-16C	559/1.010	1.010	✓	1.550	1.035	98
7-25-77	GLM	724-16D	559/1.010	1.010	✓	1.555	1.035	98
7-25-77	GLM	724-16E	559/1.010	1.010	✓	1.560	1.035	98
7-25-77	GLM	724-16F	559/1.010	1.010	✓	1.565	1.035	98
7-25-77	GLM	724-16G	559/1.010	1.010	✓	1.570	1.035	98
7-25-77	GLM	724-16H	559/1.010	1.010	✓	1.575	1.035	98
7-25-77	GLM	724-16I	559/1.010	1.010	✓	1.580	1.035	98
7-25-77	GLM	724-16J	559/1.010	1.010	✓	1.585	1.035	98
7-25-77	GLM	724-16K	559/1.010	1.010	✓	1.590	1.035	98
7-25-77	GLM	724-16L	559/1.010	1.010	✓	1.595	1.035	98
7-25-77	GLM	724-16M	559/1.010	1.010	✓	1.600	1.035	98
7-25-77	GLM	724-16N	559/1.010	1.010	✓	1.605	1.035	98
7-25-77	GLM	724-16O	559/1.010	1.010	✓	1.610	1.035	98
7-25-77	GLM	724-16P	559/1.010	1.010	✓	1.615	1.035	98
7-25-77	GLM	724-16Q	559/1.010	1.010	✓	1.620	1.035	98
7-25-77	GLM	724-16R	559/1.010	1.010	✓	1.625	1.035	98
7-25-77	GLM	724-16S	559/1.010	1.010	✓	1.630	1.035	98
7-25-77	GLM	724-16T	559/1.010	1.010	✓	1.635	1.035	98
7-25-77	GLM	724-16U	559/1.010	1.010	✓	1.640	1.035	98
7-25-77	GLM	724-16V	559/1.010	1.010	✓	1.645	1.035	98
7-25-77	GLM	724-16W	559/1.010	1.010	✓	1.650	1.035	98
7-25-77	GLM	724-16X	559/1.010	1.010	✓	1.655	1.035	98
7-25-77	GLM	724-16Y	559/1.010	1.010	✓	1.660	1.035	98
7-25-77	GLM	724-16Z	559/1.010	1.010	✓	1.665	1.035	98
7-25-77	GLM	724-16A	559/1.010	1.010	✓	1.670	1.035	98
7-25-77	GLM	724-16B	559/1.010	1.010	✓	1.675	1.035	98
7-25-77	GLM	724-16C	559/1.010	1.010	✓	1.680	1.035	98
7-25-77	GLM	724-16D	559/1					

$$-P = 100 \frac{\text{Observed}}{\text{Known}} \text{ for Standards}$$
$$P = 100 \frac{\text{Observed} - \text{Background}}{\text{Spice}} \text{ for Sample Spikes}$$

25

ATTACHMENT C
COUNTY ROAD MAP WITH
THREE MILE RADIUS

JONES & NEUSE

Handwritten signature

ATTACHMENT D
USGS TOPOGRAPHIC MAP WITH
THREE MILE RADIUS

JONES & NEUSE

1944-1945

TEXAS WATER COMMISSION

Paul Hopkins, Chairman
John O. Houchins, Commissioner
B. J. Wynne, III, Commissioner



James K. Rourke, Jr., General Counsel
Michael E. Field, Chief Examiner
Karen A. Phillips, Chief Clerk

Larry R. Sward, Executive Director

STATE SUPERFUND SITE DISPOSITION

TO: _____

FROM: _____

Site Name: _____
Location: _____
TWC Registration No.: _____
EPA ID No.: _____

No further action ☐

Further action needed by:

EPA

TDH

Emergency Response

Site Assessment

☐☐☐

TWC

OTHER

District

Water Quality

Enforcement

☐☐☐☐

Explain: _____

Remarks: _____

TEXAS WATER COMMISSION

Paul Hopkins, Chairman
Ralph Roming, Commissioner
John O. Houchins, Commissioner



C. Martin Wilson III, General Counsel
James K. Rourke, Jr., Chief Examiner
Mary Ann Helmer, Chief Clerk

Larry R. Soward, Executive Director

August 4, 1987

Mr. Jimmy Tedford (FDIC)
P. O. Box 3148
Midland, Texas 79702

Re: B & W welding and Construction Site
(#3 East Industrial Loop)

Dear Mr. Tedford:

On March 17, 1987, an inspection was conducted of the B & W Welding and Construction Site located at No. 3 East Industrial Loop in Midland, Texas, by Jones and Neuse, Inc., consultants for the Texas Water Commission (TWC), and TWC representatives. Jones and Neuse, Inc. was retained by the TWC to perform inspections at potential hazardous waste sites.

The inspection revealed that the well at the B & W site is completed below grade with no surface casing. This improper well construction can allow outside sources of contamination from the adjacent area to enter the well. Field screening of soils around the well indicated the presence of chromium, however, the samples did not reveal leachable levels of E. P. Toxicity chromium. Therefore, a hazardous waste is not present at the site.

To prevent any further or possible contamination of the groundwater, the well should be completed properly or plugged and any chromium-containing soil removed from the premises. Should chromium-contaminated soil be left on-site, the property is subject to deed recordation requirements as outlined in Texas Administrative Code §335.5 for industrial solid waste.

If you have any questions or problems, please call Mike Gutzmer at 512/463-7833.

Sincerely,

Christy Smith

Christy Smith
State Superfund Unit Head
Superfund Section
Hazardous and Solid Waste Division

MPG:bt

TELEPHONE MEMO TO THE FILE

(Please complete with typewriter or black pen)

Call To: Mr. J. Smith

Call From: Mr. J. Smith

Date of Call: _____

File No.: _____

Phone No.: (____) _____

Subject: Mr. J. Smith

Information for File:

Mr. J. Smith is a potential target of B. & B.
 (Caldwell) and subjects to investigation report his
 disloyalty. Captain report and summary letter
 from Foxboro, Mass.
 to Mr. J. Smith, TX 71464
 which was sent to Mr. J. Smith and is available
 to Mr. J. Smith.

Signed: _____

Handwritten signature

TEXAS WATER COMMISSION

Paul Hopkins, Chairman
Ralph Roming, Commissioner
John O. Houchins, Commissioner



Larry R. Soward, Executive Director
Mary Ann Helmer, Chief Clerk
James K. Bourke, Jr., General Counsel

April 10, 1987

Mr. Jimmy Tedford
FDIC
Midland Consolidated Office
P.O. Box 2836
Midland, Texas 79702

Re: #3 Industrial Loop Site Investigation

Dear Mr. Tedford:

This letter has been written pursuant to our telephone conversation of April 8, 1987. The site known as #3 Industrial Loop located in Midland, Texas, was investigated on March 17, 1987, by our consultant-Jones and Nouse, Inc., (JN). At that time soil and water samples were collected on the property site. Samples were also collected on the property directly south of #3 Industrial Loop. JN will be sending the TWC results of their investigation in the near future. We will be happy to forward a copy to you upon receipt.

If you have any questions, please feel free to contact Ms. Kate Arthur of the State Superfund Unit at 512/463-8055.

Sincerely,

Christy Smith

Christy Smith
State Superfund Unit Head
Hazardous and Solid Waste Division

KLA/kk

TEXAS WATER COMMISSION

Paul Hopkins, Chairman
Ralph Roming, Commissioner
John O. Hoeschline, Commissioner



Larry R. Seward, Executive Director
Mary Ann Johnson, Chief Clerk
James K. Bourke, Jr., General Counsel

March 16, 1987

Mr. Charles Faulds, P.E.
Jones and Mause, Inc.
2720 Bee Caves Road
Austin, Texas 78746

Re: Sampling the Week of March 16, 1987

Dear Mr. Faulds:

The State Superfund Unit of the Texas Water Commission (TWC) has received the Data Collection Guidelines and the Executive Reports for the West Texas sites to be visited the week of March 16, 1987. The TWC would like to make the following comments and changes:

K and Kompany Electric - Midland, Texas

We will omit this site from further investigation. The invoices for the month of March should reflect this omission. Additional work will be substituted at a later date.

#1 Industrial Loop Site - Midland, Texas

Extensive field screening, both soil and ground water, will be done at this site. A spectrophotometer will be provided by the TWC to obtain relative concentrations of chromium in area water wells. All water samples will be held - not analyzed at this time. The holding time for this test is six months. A map will be drawn using the spectrophotometer data to correlate concentrations and ascertain the probable location of contamination. Soil screening samples will then be taken. Hot spots may be analyzed. A background soil sample will be collected and held. A map will be made showing the location of all areas field screened, samples, and wells.

Precision Machine and Supply - Odessa, Texas

Surface soils will be screened for lead, chromium, and pH. Borings shall be taken to determine the depth of contamination. If the depth is significant for ranking

Mr. Charles Faulds, P.E.
Page 2
March 13, 1987

purposes, a sample shall be analyzed for lead and chromium. A background soil sample shall be collected and analyzed for lead and chromium. The nearest down-gradient water well used for a drinking water supply will be sampled and analyzed for chromium and lead. The nearest up-gradient water well will be sampled but not analyzed pending the results of the down-gradient sample. A map will be made showing the location of all areas field screened, samples, and wells. TWC chain of custody tags shall be double checked for concentration.

El Paso Acid Corporation - El Paso, Texas

The site will be field screened for pH. Jones and Neuse should be prepared to take soil samples for hydrocarbon constituents, EP tox heavy metals, as well as pH. The actual types and numbers of samples analyzed will be determined by the TWC in the field at the time of inspection. A map will be made reflecting the field activity.

If you have any questions or comments, please contact Ms. Kate Arthur of the State Superfund Unit regarding this matter.

Sincerely,



David H. Sorrells, P.E.
Chief, Superfund Section
Hazardous and Solid Waste Division

KAscc

[Handwritten signature]

[Handwritten signature]

TEXAS WATER COMMISSION

Paul Hopkins, Chairman
Ralph Roming, Commissioner
John O. Houchins, Commissioner



James R. Soward, Executive Director
Mary Ann Helmer, Chief Clerk
James K. Bouke, Jr., General Counsel

February 20, 1987

Mr. Jimmy Tedford
Federal Deposit Insurance Corporation
P. O. Box 3148
Midland, Texas 79702

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: #3 Industrial Loop Site

Dear Mr. Tedford:

The Texas Water Commission (TWC) is conducting a statewide program to assess potential hazardous waste facilities or areas to determine what types of waste may be present and if any of these sites pose an "imminent and substantial endangerment to public health and safety or the environment" in accordance with 31 Texas Administrative Code Chapter 335, Subchapter K. The TWC is authorized to conduct these inspections by §7(c) and §13(b)(1) of the Texas Solid Waste Disposal Act. The TWC hereby informs you that your facility or area has been selected for assessment after a review of the available and pertinent file material.

The consulting firm of Jones and Neuse (JN) is under contract with the TWC and is a duly authorized representative of the TWC. As representatives of the TWC, employees of JN may, upon presenting a letter of introduction, enter any facility or area to inspect a site. In accordance with the Texas Solid Waste Disposal Act, §7(a), authorized agents or employees of the TWC have the right to enter any property for the purpose of inspecting and investigating conditions relating to solid waste management and control. The TWC would appreciate your cooperation with JN personnel as you would cooperate with any State representative.

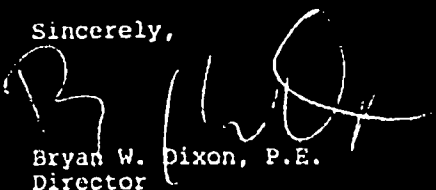
If samples are collected, your facility representative may obtain, upon request, a receipt describing the samples collected. You may also request a portion of each sample before the JN representative leaves the facility. Any such information must be specified as confidential at the time of the inspection so that appropriate protective measures may be taken. An inspection may include reviewing records, taking photographs, and collecting samples.

Mr. Jimmy Tedford
Page 2
February 20, 1987

Mr. Michael Dick or one of his staff will attempt to contact you prior to inspecting the site. The inspection is tentatively scheduled for the week of March 16-20 or April 13-17.

Should you have any questions regarding this letter, please feel free to contact Ms. Christy Smith, State Superfund Unit Head at 512/463-7785.

Sincerely,


Bryan W. Dixon, P.E.
Director
Hazardous and Solid Waste Division

CS:bt

cc: TWC District 10 Office

REMARKS: Complete items 1 and 2 when international services are desired, and complete items 3 and 4 for your address in the **UNITED STATES** only. For other countries, use the appropriate form and instructions. For **POSTAGE** and **PAID** stamps, see the instructions on the back of this form.

☐ Show to person delivered, date, and addressee's address. ☐ Registered Delivery.

1. Article Addressed to:
 Mr. Jimmy Tudford
 Federal Deposit Insurance Corp.
 P.O. Box 3148
 Midland, Texas 79702

2. Article No.: 074574

3. Type of Service:
☐ Registered Certified Extraordinary Mail ☐ Insured (75¢)

4. Signature - Addressee:
 X

5. Signature - Sender:
 J. Tudford

6. Date of Mailing:
 2-27-87

7. Addressee's Address (ONLY if Registered and for proof):

PS Form 3811, Feb. 1984 DOMESTIC RETURN RECEIPT

**#3 INDUSTRIAL LOOP SITE
MIDLAND, TEXAS**

The old B & W Building at No. 3 Industrial Loop was formally a metal fabrication and welding shop. Answering a complaint, a district inspection found the water in an on-site water well to be green. Analysis of the well made in December 1984 had chromium values of 1.6 ppm. A private sample taken of the same well in April 1985 show 2.5 ppm of chromium. Samples taken at two off-site wells, showed the wells to be below .05 ppm.

Extensive sampling of area soils have shown no chromium. The source of the chromium in the groundwater is thought to be in a pit covered by cement located west of the site. A composite sample from the caliche pit located to the north had no chromium. There are no underground storage tanks or surface impoundments on site. One sample of soil taken "between the concrete and asphalt" showed a chromium level of 580 ppm. A phone call to Matt Fokheim indicated that the location of this sample is at Maverick Drilling, 1/4 mile to the northwest. The area has since been removed and disposed of.

Once on site, a brief overview will be conducted. The area showing high levels of chromium will be field screened and if positive I-E.P. Toxic chromium will be taken. Three water samples will be taken at the one on-site well and two off-site wells. A map will be made of the site showing the location of all areas field screened, samples and wells. Photographs of the site will be taken.

DATA COLLECTION
GUIDELINE

JN Submittal Date _____

TWC Approval Date _____

Site B & W Building (#3 Industrial Loop) - Midland, Texas

Team Leader Robert L. Sherrill

Team Member Miriam Renkin

TWC Contacts Kate Arthur 512/463-8055

Site Contacts Jimmy Tedford 800/592-4023

WASTE Type Anticipated Soil Contamination

Volume Unknown

Samples Anticipated EP Tox Chrome

Screening Analysis Field screen chromium

Comments _____

SURFACE WATER Availability None anticipated

Samples _____

Comments _____

GROUNDWATER Availability 1 well onsite/2 off-site

Samples Anticipated 3 Chromium

Screening Analysis _____

Comments _____

SURFACE SOIL Visible Stains Anticipated None

Soil Gas Sampling None

AIR Release Anticipated None

COMMENTS Site has been extensively studied by District 10 personnel. No
evidence of soil contamination has been found. Groundwater con-
tamination to 2.5 ppm Cr⁶⁺ has been found.

SAMPLE DEVIATIONS NO YES
(Explanation Attached; See Attached Map)

JONES & NEUSE

11/1/80



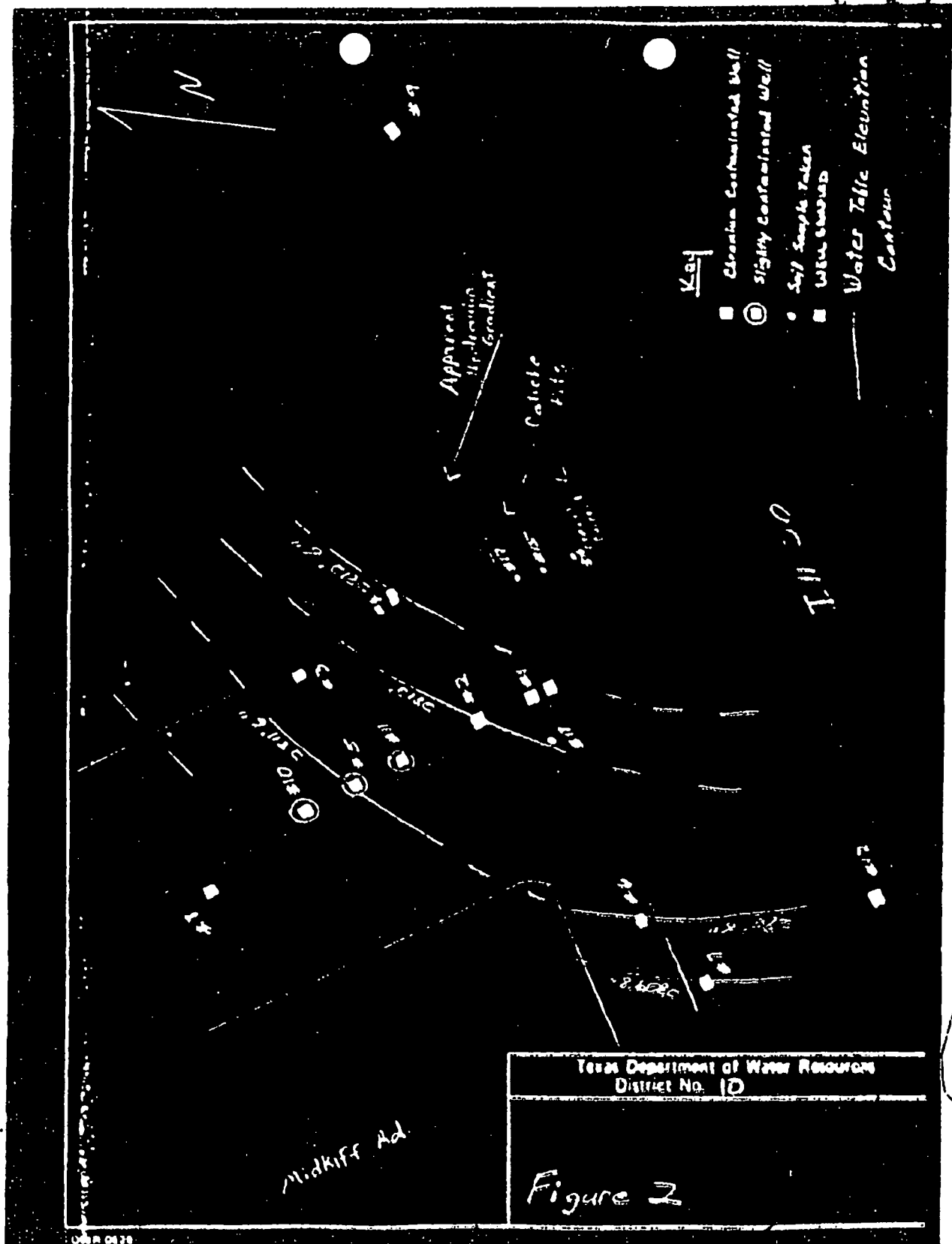
Figure 1

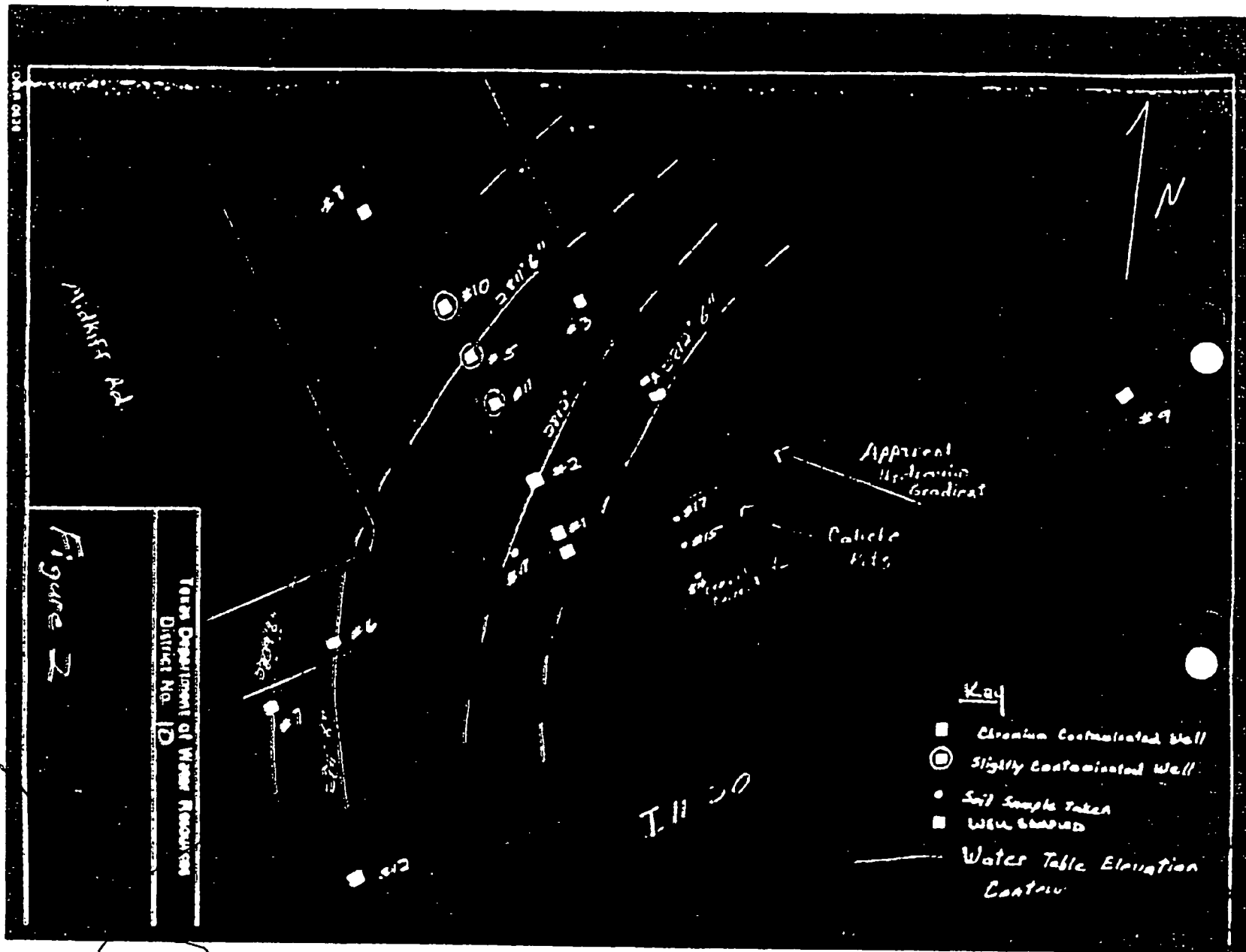
10/10/1941



Figure 1

10/10/68





FORM 1488
DANS TEXAS 78738
683-3224 OR 683-1040

Martin Water Laboratories, Inc.

708 W INDIANA
MIDLAND TX 79701
PHONE 683-4321

RESULT OF WATER ANALYSES

TO: Mr. Paul Evans
P.O. Box 3148, Midland, Texas

LABORATORY NO. 485145
SAMPLE RECEIVED 4-10-85
RESULTS REPORTED 4-12-85

COMPANY YDIC

LEASE

FIELD OR POND

SECTION BLOCK

SURVEY

COUNTY

STATE

SOURCE OF SAMPLE AND DATE TAKEN

NO. 1 Raw water - taken from water well @ #3 Industrial Loop, East. 4-10-85

NO. 2 Maximum contents for drinking water as recommended by the Texas Dept. of Health.

NO. 3

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.				
Color when Sampled				
Color when Filtered				
Bitter Taste as HCO ₃				
Super-saturation as CaCO ₃				
Under-saturation as CaCO ₃				
Total Hardness as CaCO ₃				
Calcium as Ca				
Magnesium as Mg				
Sodium and Potassium				
Sulfate as SO ₄				
Chloride as Cl				
Iron as Fe				
Copper as Cu				
Fluoride as F				
Total Solids Calculated				
Temperature				
Carbon Dioxide Calculated				
Dissolved Oxygen - ml/l				
Hydrogen Sulfide				
Resistivity, ohm/cm at 77° F				
Suspended Solids				
Filterable Solids as mg/l				
Volume Filtered - ml				
Chlorination - mg/l (as available Cl ₂)	2.52	0.05		

Results Reported as Milligrams Per Liter

Additional Determinations And Remarks

The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form 1488

By

W. Reagon White, B.S.

TEXAS WATER QUALITY BOARD

No. HM07398

District 10

County Millam Basin Colorado

Discharger Name

B & W Bldg. - FDI

Time Collected 9:35 a.m.

Plant Name

2 Industrial Corp

Point of Collection 3 ft. on side

Method of Flow Measurement

5 ft. well after ~15 min.

PERMIT NUMBER		PAGE NO.	DATE	Chlorine Contact Time	
1		9	10/13/54	Date Shipped 12/13/54	
21 CODE		26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE
Flow (gpd)		Water Temperature (°F)	pH		
0 0 0 5 6		0 0 0 1 1	0 0 4 0 0		
D.O. (mg/l)		Turbidity (NTU)			
0 0 1 0 0		0 0 0 7 0			

TEXAS WATER QUALITY BOARD

No. HM07398

District 10

Lab. Used TDI

Lab. No.

EW5-800

Type Sample: Heavy Metals

Material Sampled: Raw, Partially Treated

Grab

Composite

Method of Preservation 5% NaOH

Observations

Type Facility 15 ft. well

Auxiliary Tags

Date Completed 12/23/54

Analyst's Signature

21 CODE		26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE	62
Arsenic (ug/l)		Barium (ug/l)					
0 1 0 0 2		0 3 0 0 2	< 200		0 1 0 2 2		
Cadmium (ug/l)		Chromium (ug/l)	1.00		0 1 0 4 2		< 20
0 1 0 2 2		0 1 0 1 4			Mercury (ug/l)		
Lead (ug/l)		Manganese (ug/l)	0 1 0 3 5		2 1 9 0 0		< 0.8
0 1 0 3 1		0 1 0 3 5			Silver (ug/l)		
Nickel (ug/l)		Selenium (ug/l)	0 1 1 4 2		0 1 0 2 2		10
0 1 0 4 2		0 1 1 4 2	< 5				
Zinc (ug/l)							
0 1 0 9 2							

No. GW

TEXAS DEPARTMENT OF WATER RESOURCES

P.O. Box 13087, Capitol Station

Austin, Texas 78711

Work No. 7072Org. No. 590Sample No. Owner BrW Bldg - Mr. Herdal Benton Address #3 Industrial Loop Zip County Midland Well No. Location SE corner of Industrial Loop - MidlandDate Drilled ~ 1981 Depth Aquifer OgallalaWater Level in well Sampled After Pumping ~ 15 Mins. (Hrs.) Yield GPM Temperature °FPoint of Collection spigot on water side of building Appearance Clear Turbid light green Color Use Wells have been vacated for Remarks (Over)Date Collected 10/31/84 Time ~ 3:40 PM By Joan MitchellSend copy of completed analysis to Dist 10 - J. Mitchell TDWR Office No. 10

TOWN 0728

No. GW 2164

TEXAS DEPARTMENT OF WATER RESOURCES

P.O. Box 13087, Capitol Station

Work No. 7072Org. No. 590Sample No. Point of Collection spigot on water side of buildingLab Used TDH Method of Preservation iceType of Facility welding shop Date Completed 11-16-84 Analyst's Signature ML

	Mg/l	CPM		Mg/l	CPM		Other Ions	Mg/l
Silica	<u>51</u>		Carbonate	<u>0</u>		<input type="checkbox"/>		
Calcium	<u>156</u>	<u>3.32</u>	Bicarbonate	<u>387</u>	<u>4.7</u>	<input type="checkbox"/>		
Magnesium	<u>64</u>	<u>5.24</u>	Sulfate	<u>430</u>	<u>8.46</u>	<input type="checkbox"/>		
Sodium	<u>331</u>	<u>14.34</u>	Chloride	<u>457</u>	<u>13.73</u>	<input type="checkbox"/>		
Total						<input type="checkbox"/>		
<input type="checkbox"/> Potassium	<u>20</u>	<u>0.16</u>	Nitrate	<u>13.81</u>	<u>0.19</u>	<input type="checkbox"/>		
<input type="checkbox"/> Iron		<u>not</u>	pH	<u>7.5</u>	Total	<input type="checkbox"/>		
		<u>36.21</u>			<u>27.58</u>			
			Dissolved Solids (sum)	<u>11.94</u>				

Remarks

Total Alkalinity as CaCO₃ 1.55 (4.7)

Total Hardness as CaCO₃ 6.71 (13.54)

Specific Conductance (Microhm/cm) 1040

☐ Items will be analyzed if checked, total iron requires separate sample.

TEXAS WATER QUALITY BOARD

No. HM07397

District

County

Basin

Discharger Name

Time Collected

Plant Name

Point of Collection

Method of Flow Measurement

PERMIT NUMBER

PAGE

DATE

Chlorine Contact Time

NO.

MO.

DAY

Date Shipped

Collector's Signature

21 CODE

26 PARAMETER VALUE

30 CODE

30 PARAMETER VALUE

30 CODE

34 PARAMETER VALUE 62

Flow (cfs)

Water Temperature (°F)

pH

D.O. (mg/l)

Turbidity (NTU)

...

TEXAS WATER QUALITY BOARD

No. HM07397

Field Sample ID No.

Location

Observations

...

...

EW5-535

Material Sampled For: Partially

Method of Preservation

Type Facility

Collection Date

Date Completed

Anal. by Signature

21 CODE

26 PARAMETER VALUE

30 CODE

30 PARAMETER VALUE

30 CODE

34 PARAMETER VALUE 62

Arsenic (mg/l)

Barium (mg/l)

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TEXAS WATER QUALITY BOARD

No. HM07398

District 10

County Millam Basin Colorado

Discharger Name

B & W Bldg. - FDC

Time Collected 9:35 a.m.

Plant Name

2 Industrial Corp

Point of Collection 3 ft. on side

Method of Flow Measurement

5 ft. well after ~15 min.

PERMIT NUMBER		PAGE NO.	DATE	Chlorine Contact Time	
1		9	10/13/54	Date Shipped 12/13/54	
21 CODE		26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE
Flow (gpd)		Water Temperature (°F)	pH		
0 0 0 5 6		0 0 0 1 1	0 0 4 0 0		
D.O. (mg/l)		Turbidity (NTU)			
0 0 1 0 0		0 0 0 7 0			

TEXAS WATER QUALITY BOARD

No. HM07398

District 10

Lab. Used TDI

Lab. No. EW5-800

Type Sample: Heavy Metals

Material Sampled: Raw, Partially Treated

Grab

Composite

Method of Preservation 5% NaOH

Observations

Type Facility 150 galon

Auxiliary Tags

Date Completed 12/23/54

Analyst's Signature

21 CODE		26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE	62
Arsenic (ug/l)		Barium (ug/l)					
0 1 0 0 2		0 3 0 0 2	< 200		0 1 0 2 2		
Cadmium (ug/l)		Chromium (ug/l)	1.00		0 1 0 4 2		< 20
0 1 0 2 2		0 1 0 1 4			Mercury (ug/l)		
Lead (ug/l)		Manganese (ug/l)	2.50		2 1 9 0 0		< 0.8
0 1 0 5 1		0 1 0 3 5			Silver (ug/l)		
Nickel (ug/l)		Selenium (ug/l)	2.00		0 1 0 2 2		10
0 1 0 4 2		0 1 1 4 2					
Zinc (ug/l)			2.50				
0 1 0 9 2							

No. GW

TEXAS DEPARTMENT OF WATER RESOURCES

P.O. Box 13087, Capitol Station

Austin, Texas 78711

Work No. 7072Org. No. 590Sample No. Owner BW Bldg - Mr. Herdal Benton Address #3 Industrial Loop Zip County Midland Well No. Location SE corner of Industrial Loop - MidlandDate Drilled ~ 1981 Depth Aquifer OgallalaWater Level in well Sampled After Pumping ~ 15 Mins. (Hrs.) Yield GPM Temperature °FPoint of Collection spigot on water side of building Appearance Clear Turbid light green Color Use Wells have been vacated for Remarks (Over)Date Collected 10/31/84 Time ~ 3:40 PM By Joan MitchellSend copy of completed analysis to Dist 10 - J. Mitchell TDR Office No. 10

TOWN 0728

No. GW 2164

TEXAS DEPARTMENT OF WATER RESOURCES

P.O. Box 13087, Capitol Station

Work No. 7072Org. No. 590Sample No. Point of Collection spigot on water side of buildingLab Used TDH Method of Preservation iceType of Facility welding shop Date Completed 11-16-84 Analyst's Signature ML

	Mg/l	CPM		Mg/l	CPM		Other Ions	Mg/l
Silica	<u>51</u>		Carbonate	<u>0</u>		<input type="checkbox"/>		
Calcium	<u>156</u>	<u>3.32</u>	Bicarbonate	<u>387</u>	<u>4.7</u>	<input type="checkbox"/>		
Magnesium	<u>64</u>	<u>5.24</u>	Sulfate	<u>430</u>	<u>8.46</u>	<input type="checkbox"/>		
Sodium	<u>331</u>	<u>14.34</u>	Chloride	<u>457</u>	<u>13.73</u>	<input type="checkbox"/>		
Total						<input type="checkbox"/>		
<input type="checkbox"/> Potassium	<u>20</u>	<u>0.16</u>	Nitrate	<u>13.81</u>	<u>0.19</u>	<input type="checkbox"/>		
<input type="checkbox"/> Iron		<u>not 36.21</u>	pH	<u>7.5</u>	Total	<input type="checkbox"/>		
			Dissolved Solids (sum)	<u>116.94</u>				

Remarks

Total Alkalinity as CaCO₃ 125 (4.7)

Total Hardness as CaCO₃ 67 (13.54)

Specific Conductance (Microhm/cm) 1040

☐ Items will be analyzed if checked, total iron requires separate sample.

TEXAS DEPARTMENT OF HEALTH
GC/MS ANALYSIS REPORT
EPA PRIORITY POLLUTANTS

ANALYST: CARL HUGGERS DATE: 12/14/84

CLIENT: HSEH

IN SILENCE: RWS-535
THE SAMPLE NAME: 11M 07397

* ALL EMPTY SPACES BELOW INDICATE NONE DETECTED *

SAMPLE TYPE: WATER

SAMPLE CONDITION:

ACID EXTRACTABLES TO 100% MEQ/L (100% MEQ/L) (100% MEQ/L) (100% MEQ/L)

NAME	UNIT	NAME	UNIT	NAME	UNIT
4-CHLOROPHENOL	<2.0	4-CHLOROPHENOL	<2.0	4-CHLOROPHENOL	<2.0
2,4-DICHLOROPHENOL	<2.0	2,4-DICHLOROPHENOL	<2.0	2,4-DICHLOROPHENOL	<2.0
2,6-DICHLOROPHENOL	<2.0	2,6-DICHLOROPHENOL	<2.0	2,6-DICHLOROPHENOL	<2.0
2,4,6-TRICHLOROPHENOL	<2.0	2,4,6-TRICHLOROPHENOL	<2.0	2,4,6-TRICHLOROPHENOL	<2.0

ACID EXTRACTABLES TO 100% MEQ/L (100% MEQ/L) (100% MEQ/L) (100% MEQ/L)

NAME	UNIT	NAME	UNIT	NAME	UNIT
0,0-DICHLOROPHENOL	<2.0	0,0-DICHLOROPHENOL	<2.0	0,0-DICHLOROPHENOL	<2.0
0,2-DICHLOROPHENOL	<2.0	0,2-DICHLOROPHENOL	<2.0	0,2-DICHLOROPHENOL	<2.0
1,3-DICHLOROPHENOL	<2.0	1,3-DICHLOROPHENOL	<2.0	1,3-DICHLOROPHENOL	<2.0
1,4-DICHLOROPHENOL	<2.0	1,4-DICHLOROPHENOL	<2.0	1,4-DICHLOROPHENOL	<2.0
1,2,3-TRICHLOROPHENOL	<2.0	1,2,3-TRICHLOROPHENOL	<2.0	1,2,3-TRICHLOROPHENOL	<2.0
0,1,2-TRICHLOROPHENOL	<2.0	0,1,2-TRICHLOROPHENOL	<2.0	0,1,2-TRICHLOROPHENOL	<2.0
0,1,3-TRICHLOROPHENOL	<2.0	0,1,3-TRICHLOROPHENOL	<2.0	0,1,3-TRICHLOROPHENOL	<2.0
0,1,4-TRICHLOROPHENOL	<2.0	0,1,4-TRICHLOROPHENOL	<2.0	0,1,4-TRICHLOROPHENOL	<2.0
0,2,3-TRICHLOROPHENOL	<2.0	0,2,3-TRICHLOROPHENOL	<2.0	0,2,3-TRICHLOROPHENOL	<2.0
0,2,4-TRICHLOROPHENOL	<2.0	0,2,4-TRICHLOROPHENOL	<2.0	0,2,4-TRICHLOROPHENOL	<2.0
0,3,4-TRICHLOROPHENOL	<2.0	0,3,4-TRICHLOROPHENOL	<2.0	0,3,4-TRICHLOROPHENOL	<2.0
0,1,3,4-TRICHLOROPHENOL	<2.0	0,1,3,4-TRICHLOROPHENOL	<2.0	0,1,3,4-TRICHLOROPHENOL	<2.0
0,1,2,3-TRICHLOROPHENOL	<2.0	0,1,2,3-TRICHLOROPHENOL	<2.0	0,1,2,3-TRICHLOROPHENOL	<2.0
0,1,2,4-TRICHLOROPHENOL	<2.0	0,1,2,4-TRICHLOROPHENOL	<2.0	0,1,2,4-TRICHLOROPHENOL	<2.0
0,1,3,5-TRICHLOROPHENOL	<2.0	0,1,3,5-TRICHLOROPHENOL	<2.0	0,1,3,5-TRICHLOROPHENOL	<2.0
0,1,4,5-TRICHLOROPHENOL	<2.0	0,1,4,5-TRICHLOROPHENOL	<2.0	0,1,4,5-TRICHLOROPHENOL	<2.0
0,2,3,4-TRICHLOROPHENOL	<2.0	0,2,3,4-TRICHLOROPHENOL	<2.0	0,2,3,4-TRICHLOROPHENOL	<2.0
0,2,3,5-TRICHLOROPHENOL	<2.0	0,2,3,5-TRICHLOROPHENOL	<2.0	0,2,3,5-TRICHLOROPHENOL	<2.0
0,2,4,5-TRICHLOROPHENOL	<2.0	0,2,4,5-TRICHLOROPHENOL	<2.0	0,2,4,5-TRICHLOROPHENOL	<2.0
0,3,4,5-TRICHLOROPHENOL	<2.0	0,3,4,5-TRICHLOROPHENOL	<2.0	0,3,4,5-TRICHLOROPHENOL	<2.0
0,1,2,3,4-TRICHLOROPHENOL	<2.0	0,1,2,3,4-TRICHLOROPHENOL	<2.0	0,1,2,3,4-TRICHLOROPHENOL	<2.0
0,1,2,3,5-TRICHLOROPHENOL	<2.0	0,1,2,3,5-TRICHLOROPHENOL	<2.0	0,1,2,3,5-TRICHLOROPHENOL	<2.0
0,1,2,4,5-TRICHLOROPHENOL	<2.0	0,1,2,4,5-TRICHLOROPHENOL	<2.0	0,1,2,4,5-TRICHLOROPHENOL	<2.0
0,1,3,4,5-TRICHLOROPHENOL	<2.0	0,1,3,4,5-TRICHLOROPHENOL	<2.0	0,1,3,4,5-TRICHLOROPHENOL	<2.0
0,2,3,4,5-TRICHLOROPHENOL	<2.0	0,2,3,4,5-TRICHLOROPHENOL	<2.0	0,2,3,4,5-TRICHLOROPHENOL	<2.0
0,1,2,3,4,5-TRICHLOROPHENOL	<2.0	0,1,2,3,4,5-TRICHLOROPHENOL	<2.0	0,1,2,3,4,5-TRICHLOROPHENOL	<2.0

ACID EXTRACTABLES TO 100% MEQ/L (100% MEQ/L) (100% MEQ/L) (100% MEQ/L)

NAME	UNIT	NAME	UNIT	NAME	UNIT
4-CHLOROPHENOL	<2.0	4-CHLOROPHENOL	<2.0	4-CHLOROPHENOL	<2.0
2,4-DICHLOROPHENOL	<2.0	2,4-DICHLOROPHENOL	<2.0	2,4-DICHLOROPHENOL	<2.0
2,6-DICHLOROPHENOL	<2.0	2,6-DICHLOROPHENOL	<2.0	2,6-DICHLOROPHENOL	<2.0
2,4,6-TRICHLOROPHENOL	<2.0	2,4,6-TRICHLOROPHENOL	<2.0	2,4,6-TRICHLOROPHENOL	<2.0

ACID EXTRACTABLES TO 100% MEQ/L (100% MEQ/L) (100% MEQ/L) (100% MEQ/L)

NAME	UNIT	NAME	UNIT	NAME	UNIT
0,0-DICHLOROPHENOL	<2.0	0,0-DICHLOROPHENOL	<2.0	0,0-DICHLOROPHENOL	<2.0
0,2-DICHLOROPHENOL	<2.0	0,2-DICHLOROPHENOL	<2.0	0,2-DICHLOROPHENOL	<2.0
1,3-DICHLOROPHENOL	<2.0	1,3-DICHLOROPHENOL	<2.0	1,3-DICHLOROPHENOL	<2.0
1,4-DICHLOROPHENOL	<2.0	1,4-DICHLOROPHENOL	<2.0	1,4-DICHLOROPHENOL	<2.0
1,2,3-TRICHLOROPHENOL	<2.0	1,2,3-TRICHLOROPHENOL	<2.0	1,2,3-TRICHLOROPHENOL	<2.0
0,1,2-TRICHLOROPHENOL	<2.0	0,1,2-TRICHLOROPHENOL	<2.0	0,1,2-TRICHLOROPHENOL	<2.0
0,1,3-TRICHLOROPHENOL	<2.0	0,1,3-TRICHLOROPHENOL	<2.0	0,1,3-TRICHLOROPHENOL	<2.0
0,1,4-TRICHLOROPHENOL	<2.0	0,1,4-TRICHLOROPHENOL	<2.0	0,1,4-TRICHLOROPHENOL	<2.0
0,2,3-TRICHLOROPHENOL	<2.0	0,2,3-TRICHLOROPHENOL	<2.0	0,2,3-TRICHLOROPHENOL	<2.0
0,2,4-TRICHLOROPHENOL	<2.0	0,2,4-TRICHLOROPHENOL	<2.0	0,2,4-TRICHLOROPHENOL	<2.0
0,3,4-TRICHLOROPHENOL	<2.0	0,3,4-TRICHLOROPHENOL	<2.0	0,3,4-TRICHLOROPHENOL	<2.0
0,1,3,4-TRICHLOROPHENOL	<2.0	0,1,3,4-TRICHLOROPHENOL	<2.0	0,1,3,4-TRICHLOROPHENOL	<2.0
0,1,2,3-TRICHLOROPHENOL	<2.0	0,1,2,3-TRICHLOROPHENOL	<2.0	0,1,2,3-TRICHLOROPHENOL	<2.0
0,1,2,4-TRICHLOROPHENOL	<2.0	0,1,2,4-TRICHLOROPHENOL	<2.0	0,1,2,4-TRICHLOROPHENOL	<2.0
0,1,3,5-TRICHLOROPHENOL	<2.0	0,1,3,5-TRICHLOROPHENOL	<2.0	0,1,3,5-TRICHLOROPHENOL	<2.0
0,1,4,5-TRICHLOROPHENOL	<2.0	0,1,4,5-TRICHLOROPHENOL	<2.0	0,1,4,5-TRICHLOROPHENOL	<2.0
0,2,3,4-TRICHLOROPHENOL	<2.0	0,2,3,4-TRICHLOROPHENOL	<2.0	0,2,3,4-TRICHLOROPHENOL	<2.0
0,2,3,5-TRICHLOROPHENOL	<2.0	0,2,3,5-TRICHLOROPHENOL	<2.0	0,2,3,5-TRICHLOROPHENOL	<2.0
0,2,4,5-TRICHLOROPHENOL	<2.0	0,2,4,5-TRICHLOROPHENOL	<2.0	0,2,4,5-TRICHLOROPHENOL	<2.0
0,3,4,5-TRICHLOROPHENOL	<2.0	0,3,4,5-TRICHLOROPHENOL	<2.0	0,3,4,5-TRICHLOROPHENOL	<2.0
0,1,2,3,4-TRICHLOROPHENOL	<2.0	0,1,2,3,4-TRICHLOROPHENOL	<2.0	0,1,2,3,4-TRICHLOROPHENOL	<2.0
0,1,2,3,5-TRICHLOROPHENOL	<2.0	0,1,2,3,5-TRICHLOROPHENOL	<2.0	0,1,2,3,5-TRICHLOROPHENOL	<2.0
0,1,2,4,5-TRICHLOROPHENOL	<2.0	0,1,2,4,5-TRICHLOROPHENOL	<2.0	0,1,2,4,5-TRICHLOROPHENOL	<2.0
0,1,3,4,5-TRICHLOROPHENOL	<2.0	0,1,3,4,5-TRICHLOROPHENOL	<2.0	0,1,3,4,5-TRICHLOROPHENOL	<2.0
0,2,3,4,5-TRICHLOROPHENOL	<2.0	0,2,3,4,5-TRICHLOROPHENOL	<2.0	0,2,3,4,5-TRICHLOROPHENOL	<2.0
0,1,2,3,4,5-TRICHLOROPHENOL	<2.0	0,1,2,3,4,5-TRICHLOROPHENOL	<2.0	0,1,2,3,4,5-TRICHLOROPHENOL	<2.0

TENTATIVE IDENTIFICATION OF THE TEN LARGEST NON PRIORITY POLLUTANT PEAKS BY COMPARISON WITH EPA/MS MASS SPECTRAL LIBRARY. QUANTITATION AS DIB-ANTHRACENE IS PROVIDED, AND THE VALUES SHOULD BE REGARDED AS APPROXIMATE

TENTATIVE
COMPOUND
IDENTIFICATION

APPROXIMATE CONCENTRATION
AS DIB-ANTHRACENE
(1) MICROGRAMS/LITER
(2) MILLIGRAMS/100GRAM

NO EXTRACTABLES DETECTED
TRICHLOROFLUOROMETHANE (AS DIB-ANTHRACENE STANDARD) 3.1

COMMENTS AND OTHER REQUESTED ANALYSES

0101/10

SIGNATURE

DATE

Richard L. Albert 12/14/84

[illegible]

TEXAS DEPARTMENT OF WATER RESOURCES

FORM 0287

11-5

No. HM 08576 District 10 County Midland Basin Colorado
Discharger Name City of Midland Time Collected 4:15 PM
Plant Name City of Midland Point of Collection City of Midland
Method of Flow Measurement Flow Meter

DATE										Chlorine Contact Time																						
Mo. Day Yr.										Date Shipped																						
Collector's Signature																																
21 CODE	26 PARAMETER VALUE										35 CODE	40 PARAMETER VALUE										49 CODE	54 PARAMETER VALUE 62									
0 0 0 5 6										0 0 0 1 1										0 0 4 0 0												
0 0 3 0 0										0 0 0 7 0																						

TEXAS DEPARTMENT OF WATER RESOURCES

No. HM 08576 District 10 Lab Used 111 Lab # EW5-1024
Type Sample: Heavy Metals Material Sampled Raw/Partially Treated
Grab Composite Method of Preservation
Type Facility
Observations Assay, Tags
Date Completed
Analyst's Signature

21 CODE	26 PARAMETER VALUE										35 CODE	40 PARAMETER VALUE										49 CODE	54 PARAMETER VALUE 62									
Chromium (ppm)																																
Nickel (ppm)																																
Zinc (ppm)																																

FEB 25 1985

No. HM 02577 District 1 County 1 Basin 1
 Discharger Name 1 Time Collected 1
 Plant Name 1 Point of Collection 1
 Method of Flow Measurement 1

PERMIT NUMBER										PAGE NO.		DATE			Chlorine Contact Time														
												Mo. Day Yr.																	
												10 11 12																	
												13 14 15																	
												16 17 18																	
												19 20																	
															Date Shipped														
															Collector's Signature														
21 CODE		26 PARAMETER VALUE								35 CODE		40 PARAMETER VALUE								49 CODE		54 PARAMETER VALUE 62							
0 0 0 6 0										0 0 0 1 1										0 0 4 0 0									
0 0 3 0 0										0 0 0 7 0																			

TEXAS DEPARTMENT OF WATER RESOURCES

No. HM 02577 District 1 Lab Used 1 Lab No. EW5-1025
 Type Sample: Heavy Metals Material Sampled: Raw, Partially Treated, 1
 Grab Composite 1 Method of Preservation 1
 Observations 1 Type Facility 1
 Date Completed 1
 Analyst's Signature 1

21 CODE		26 PARAMETER VALUE								35 CODE		40 PARAMETER VALUE								49 CODE		54 PARAMETER VALUE 62							
0 0 0 6 0										0 0 0 1 1										0 0 4 0 0									
0 0 3 0 0										0 0 0 7 0																			
Lead										Chromium																			
Nickel										Manganese																			
Zinc																													

FEB 25 1985

PERMIT NUMBER		PAGE NO.	DATE		Chlorine Contact Time
1		1	Mo.	Day	Date Shipped
1		1	10	13	13/87
1		1	10	13	Collector's Signature
1		1	10	13	13/87
21 CODE		26 PARAMETER VALUE		35 CODE	40 PARAMETER VALUE
Flow (gpd)		Water Temperature (°F)		pH	
0 0 0 5 0		0 0 0 1 3		0 0 4 0 0	
D.O. (mg/l)		Turbidity (ftu)			
0 0 1 0 0		0 0 0 7 0			

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE
010000		010007		01022	
010000		010004		01042	
010027		010004		01042	
00051		010055		01400	
010067		010047		01077	

[illegible]

Complaints

OFFICIAL COPY
TDWR CENTRAL FILES



TEXAS DEPARTMENT
OF WATER RESOURCES

CITATION NO.

4823

PARTY CITED Dowell Division-Dow Chemical Company TDWR SW Reg. 31648
Address P O Box 1858 TX Permit No. None
City Midland, Texas Zip 79702 County in which offense occurred Midland
Telephone No. AC 915 /682-4351 Date offense charged 5-18-83 TDWR to be sent to Bill Lockey

Description of offense charged A complaint investigation on May 19, 1983 revealed an unauthorized discharge of acid wastewater into an adjacent roadside ditch near the intersection of County Road 170 East and County Road 1130 South, in the Colorado River Basin, from well-service vehicles of Dowell Division-Dow Chemical Company in Midland.

CITATION Issued By

William F. Lockey, Supervisor

Date May 23, 1983

This Citation directs the party cited for the offense charged to immediately take the corrective measures. The party cited shall submit to the issuing office at the office of what corrective measures have been undertaken and the date by which such measures will be completed.

ISSUING OFFICE
Texas Department of Water
Resources
204-A West 5th Street
Odessa, Texas 79761
915/332-5122

The written notice of corrective measures
shall be submitted no later than June 3, 1983

I hereby acknowledge receipt of this CITATION.

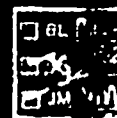
(Signature)

(Receipt does not constitute an admission of guilt.)

Certified Mail- Return Receipt Requested No. P 249 544 466



DOWELL DIVISION OF DOW CHEMICAL CO. A



June 3, 1983

RECEIVED

DEPT. OF
WATER RESOURCES
DISTRICT 10

WILLIAM F. LOCKEY, SUPERVISOR
TEXAS DEPARTMENT OF WATER RESOURCES
204-A WEST 5th STREET
ODESSA, TEXAS 79761

RECEIVED

JUL 14 '83

ENFORCEMENT AND
FIELD OPERATIONS

RE: CITATION NO. 4823

Dowell has cleaned up this spill in accordance to your recommendation and our spill control and countermeasure plan. This spill was cleaned up on May 21, 1983. We feel that there is no further action required.

Sincerely,

Donald B. Brown

Donald B. Brown
Regional Environmental Co-ordinator

DBB/ah

AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY



TEXAS DEPARTMENT OF WATER RESOURCES

1700 N. Congress Avenue
Austin, Texas

TEXAS WATER DEVELOPMENT BOARD

Louis A. Breecher, Jr., Chairman
George W. McCleskey, Vice Chairman
Glen E. Roney
W. O. Bankston
Lonnie A. "Bo" Pilgrim
Louie Welch



Charles E. Nemur

Executive Director

May 24, 1983

TEXAS WATER COMMISSION

Lee B. M. Buggart, Chairman
Edna M. Donald
John D. Stover

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
NO. P 249 544 466

Dowell Division-Dow Chemical Co.
P O Box 1858
Midland, Texas 79702

Attention: Donald Brown

Dear Mr. Brown:

Re: Citation No. 4823

A recent complaint investigation by Department representatives on May 19, 1983 revealed an unauthorized discharge of acid wastewater into an adjacent roadside ditch near the intersection of County Road 170 East and County Road 1130 South. Apparently, Dowell Division personnel intentionally discharged the material on the evening of May 18, 1983 after treating a nearby well. Such discharge into or adjacent to state waters is a violation of statutes of the Texas Water Code.

Section 26.212 of the Texas Water Code provides that

- (a) No person may discharge, or cause or permit the discharge of any waste into or adjacent to any water in the state which causes or which will cause water pollution unless the waste is discharged in compliance with a permit or order issued by the department or the Railroad Commission of Texas.
- (b) No person to whom the Texas Water Commission has issued a permit or other order authorizing the discharge of any waste at a particular location may discharge, or cause or permit the discharge of the waste in violation of the requirements of the permit or order.

Section 26.213 provides that

A person who violates the provisions of Section 26.212 of this chapter is guilty of a misdemeanor and on conviction

REPLY TO: DISTRICT 10 / 204-A W. 5TH STREET / ODESSA, TEXAS 79761 / AREA CODE 915 332 5122

P. O. Box 13087 Capitol Station • Austin, Texas 78711 • Area Code 512 475 3167

Dowell Division -Dow Chemical Co.
page 2 Citation No. 4823
May 24, 1983

is punishable by a fine of not less than \$10 nor more than \$1,000. Each day that a violation occurs constitutes a separate offense.

Due to these violations, it is necessary to issue a citation for documentation of the offense. Attached is a pink copy for your records via certified mail as referenced. Please take notice of the corrective measures due date of June 3, 1983 for submitting to the district, a written notification of what corrective measures have been undertaken and the date by which such measures will be completed. Your signature on the return receipt is acknowledgment of Citation No. 4823.

Should you need assistance, please feel free to contact me at the Odessa district office.

Sincerely,

William F. Lockey
William F. Lockey,
District Supervisor

WFL/pb

Attachment

CERTIFIED MAIL-RETURN RECEIPT REQUESTED NO. P 249 544 466

P 249 544 466
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED —
 NOT FOR INTERNATIONAL MAIL
 (Use Reverse)

Dow Chemical Company		
P O Box 1859		
Midland, Texas 79702		
CONSULT POSTMASTER FOR FEES	CERTIFIED MAIL	.20
	SPECIAL DELIVERY	.75
	REGISTERED MAIL	
OPTIONAL SERVICES		
RETURN RECEIPT SERVICE		.60
TOTAL POSTAGE AND FEES		1.55
POSTMARK OR DATE		

PS Form 3800, Apr. 1976

U.S. MAIL

POSTAGE WILL BE PAID BY ADDRESSEE

GENERAL INFORMATION

The following service is requested (check one):

☐ Return to address and date addressed

☐ Return to address, date, and address of delivery

☐ Return to address only

POSTAGE

1st Class

2nd Class

3rd Class

4th Class

5th Class

6th Class

7th Class

8th Class

9th Class

10th Class

11th Class

12th Class

13th Class

14th Class

15th Class

16th Class

17th Class

18th Class

19th Class

20th Class

21st Class

22nd Class

23rd Class

24th Class

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26th Class

27th Class

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29th Class

30th Class

31st Class

32nd Class

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35th Class

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37th Class

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39th Class

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88th Class

89th Class

90th Class

91st Class

92nd Class

93rd Class

94th Class

95th Class

96th Class

97th Class

98th Class

99th Class

100th Class

TEXAS DEPARTMENT OF WATER RESOURCES
INVESTIGATION REPORT
DISTRICT 10

RECEIVED

861784

ENFORCEMENT AND
FIELD OPERATIONS

Date Investigation Requested July 19, 1984

Source Correspondence from Texas
Road Commission (TRC)

Request for Assistance of Complaint

Name Rev. G.A. McGee (198407013) Dist. Ref. #83-7-25

TYPE

Address 1710 N. Bio Spring

City State Zip Midland, Texas 79701

Telephone office (915)-682-9474 home (915) 811-1461

Potential Surface Water _____
Potential Ground Water _____
Solid Waste _____
Water Rights _____
Others _____

Location Southeast of Midland, off of Farr Road 7.7 in Greenwood.

Alleged Problem Chemicals are stored in metal building which is adjacent to
Rev. McGee's water well.

Summary of Investigation The TCCOEN TRAT TREATERS (owned by Mr. Joe Froese
(Pre-Treat-915/687-3-331). Various treating chemicals
(naptha, etc.) utilized to maintain the integrity of a production oil/was
well, are stored in the building in product form. Empty and/or near
empty 55 gallon steel drums that contain the treating chemical residues are
also stored in the building. These unlined drums are transported to Odessa
Drum for cleaning/recycling. The metal building is fully enclosed and has
concrete flooring which is sloped toward a small underground storage
tank to contain spillage etc.

Interim Status of Corrective Action if problem is not yet resolved

Final Resolution of Problem This complaint was referred on July 30, 1984 to the
Texas Department of Health Lubbock office is the, are currently regulating
Odessa Drum.

Date and method of notification of person making request for assistance of complaint Rev. McGee was informed

August 2, 1984 by the District 10 office of the above findings and that the
complaint was referred to the Texas Department of Health

County Midland Segment No. 1412

Lower Basin Colorado Permit No. None

William F. Loeckey, Supervisor
Date August 2, 1984

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

MACK WALLACE, Chairman
BUDDY TEMPLE, Commissioner
JAMES E. (JIM) NUGENT, Commissioner



J. H. MORROW, P.E.
Dir.
JAMES C. STEED, I.
Director, Field Operations

1124 S. 9135

CAPITOL STATION - F. O. DRAWER 1207

JUL 17 1984

ENFORCEMENT AND
FIELD OPERATIONS

July 16, 1984

Ms. Leah Burnett
Texas Department of Water Resources
Enforcement & Field Operations Division
Box 13087 Capitol Station
Austin, Texas 78711

Re: Mr. G. A. Hagee Complaint #8-0187
Pre-Treat Co.
Midland County, Texas

Dear Ms. Burnett:

The enclosed copy of our report on the subject complaint is being forwarded for your review and any assistance you might be able to provide. The problem does not appear to be related to oil and gas operations. Please contact our Midland office if you need additional information or assistance.

Very truly yours,

Bill P. Hall
Assistant Director, Field Operations

BRH:bw

Enclosure

cc: RRC-Midland

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

MAK WALLACE, Chairman
BUDDY TEMPLE, Commissioner
JAMES E. (JIM) NUGENT, Commissioner



J. H. MORROW, P.E.
Dir.
WILLIS C. STEED,
Director, Field Operations
ARCHIE P. FARR, P.E.
District Director

2500 N. BIG SPRING

P. O. BOX 2110

MIDLAND, TEXAS 79702

July 6, 1984

MEMORANDUM: Mr. Willis C. Steed, Director of Field Operations

ATTENTION: Mr. Bill R. Hall

Re: Pre-Treat Co.
Midland County, Texas

SUBJECT: Complaint Inventory No. 8-0187

COMPLAINT BY: Mr. G.A. Magee Date: July 2, 1984
1710 H. Big Spring Reported: Telephone
Midland, Texas 79701
home (915) 684-0460
office (915) 682-9474

NATURE OF COMPLAINT: Chemical stored in barn near his water well.

INVESTIGATED: Wayne G. McClung Date: July 3, 1984

RESULTS: An inspection indicated a large locked metal building very near Mr. Magee's water well. No indication of an oilfield related problem.

FOLLOW-UP: Recommend that this problem be referred to the Texas Department of Water Resources.

COMPLAINANT CONTACT: In person July 3, 1984.

Archie P. Farr, District Director

FDIC

Federal Deposit Insurance Corporation

December 15, 1986

Ms. Christy Smith
Texas Water Commission - Superfund
P. O. Box 13087
Austin, TX 78711

RE: Chromium Contaminated Site in Midland, Texas, known as
the B&W Building - Address of #3-E. Industrial Loop

Dear Ms. Smith:

Pursuant to our latest telephone conversation on Tuesday, December 2, 1986, I wish to thank you for your consideration in contacting me.

I would like to request a current written update on the status of the contamination referenced above. Your last report to me indicated that the Superfund group had begun working on this problem but had made no progress as yet. Please make a report to me at your very earliest convenience.

The FDIC is ready to sell this property and shall do so with chromium contamination in place, if possible, as holding costs for this property have become inhibitive.

If I may be of any assistance or if you have any questions, please do not hesitate to contact me at 1-800-592-4023, Extension 6484.

Very truly yours,



Paul D. Evans
Liquidation Assistant
ORE/Commercial

PDE/bjw

cc: Bill Lockey
Texas Water Commission - Dist. 10
204-A W. 5th
Odessa, TX 79761-5023

Billy Brown
Texas Water Commission
P. O. Box 13087
Austin, TX 78711

FDIC

Federal Deposit Insurance Corporation
P.O. Box 3148, Midland, Texas 79702

CERTIFIED P 496 857 064

November 26, 1986

Mr. Guy Tidmore - Superfund
Texas Water Commission
P. O. Box 13087
Austin, Texas 78711

RE: Chromium Contaminated Site in
Midland, Texas - Owned by the FDIC

Dear Mr. Tidmore:

This letter is a follow up to my previous letter dated October 24, 1986, copy attached. I have not received any type of reply from you.

The FDIC's situation is considered urgent; however, no progress is being made.

Again I wish to request your immediate attention to this matter. This real estate is for sale but the contamination is creating a major barrier.

If I may be of any assistance, please contact me at 1-800-592-5023. A reply at your earliest convenience would be deeply appreciated.

Yours very truly,



Paul D. Evans
Liquidation Assistant

PDE:om

Deposit Insurance Corporation
48, Midland, Texas 79702

October 24, 1986

Mr. Guy Tidmore - Superfund
Texas Water Commission
P.O. Box 13087
Austin, TX 78711

RE: Chromium Contaminated Site in
Midland, TX - Owned by the FDIC

Dear Mr. Tidmore:

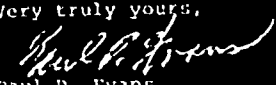
I recently spoke with Dick Ehler of your organization and he has referred me to you about the referenced contaminated site. I believe this site is on the Texas Water Commission records as the H & W Building. I refer to it by its address, #3 E. Industrial Loop.

I am contacting you, following Mr. Ehler's recommendation, about the urgency of development on this chromium site. The FDIC has owned it since the discovery of the Chromium contamination, October, 1984, and is unable to sell the property, due to the liability resting with the contaminated situation.

I wish to request your immediate attention to this matter in establishing whether this property will qualify for superfund status. The FDIC is continually incurring considerable holding costs while unable to sell this real estate.

Please reply at your earliest convenience. Thank you for your time.

Very truly yours,


Paul D. Evans
Liquidation Assistant

PDE/gsw

cc: Bill Brown
Texas Water Commission
P.O. Box 13087
Austin, TX 78711

Matt Tokheim
Texas Water Commission - Dist. 10
204-A W. 5th
Odessa, TX 79761-5023

FDIC

Federal Deposit Insurance Corporation
P.O. Box 3140, Midland, Texas 79702

DIST 10
#3140

October 24, 1986

Mr. Guy Tidmore - Superfund
Texas Water Commission
P.O. Box 13087
Austin, TX 78711

RE: Chromium Contaminated Site in
Midland, TX - Owned by the FDIC

Dear Mr. Tidmore:

I recently spoke with Dick Ehler of your organization and he has referred me to you about the referenced contaminated site. I believe this site is on the Texas Water Commission records as the B & W Building. I refer to it by its address, #3 E. Industrial Loop.

I am contacting you, following Mr. Ehler's recommendation, about the urgency of development on this chromium site. The FDIC has owned it since the discovery of the Chromium contamination, October, 1984, and is unable to sell the property, due to the liability resting with the contaminated situation.

I wish to request your immediate attention to this matter in establishing whether this property will qualify for superfund status. The FDIC is continually incurring considerable holding costs while unable to sell this real estate.

Please reply at your earliest convenience. Thank you for your time.

Very truly yours,

Paul D. Evans
Paul D. Evans
Liquidation Assistant

PDE/gaw

cc: Bill Brown
Texas Water Commission
P.O. Box 13087
Austin, TX 78711

Matt Tokheim
Texas Water Commission - Dist. 10
204-A W. 5th
Odessa, TX 79761-5023

TELEPHONE MEMO TO THE FILE

(Please complete with typewriter or blue pen)

Call To: P. Evans

Call From: PCAS, Inc.

Date of Call: 12-2-86

File No.: 113 Industrial Loop

Phone No.: (915) 685-6400

Subject: _____

Information for File:

Mr. Evans was inquiring through 2 letters to the
TIC about the status of the above referenced
property. The FDIC now owns the property
and wishes to sell it, but cannot until the
extent of contamination has been defined
and cleanup accomplished. I informed
Mr. Evans that our consultant would be
investigating the site within the next
year.

Signed:

Christy Smith

TELEPHONE MEMO TO THE FILE

(Please complete with typewriter or black pen)

Call To: EE

Call From: Ralph Johnson

Date of Call: 10/1/86

File No.: D-10

Phone No.: ()

Subject: State Superfund

Referrals

Information for File: Ralph called to give some sites that District 10 would like to be addressed under the State Superfund Investigation Contract. These sites are:

1) Presidio Pesticides - old customs airport in Presidio, no longer used - but runway is still in existence. D-10 indicates that there is definite pesticide contamination - but did not indicate what levels. There are several empty containers around the runway. Visual discoloration is readily apparent. The exact location is difficult to place for present ownership due to poor surveys in the area.

2) #3 Industrial Loop - aka B&W Building - located in the industrial area of Midland, south of downtown. Problem is chromium contamination of soil and potentially groundwater. Levels

(continued)

Signed: _____

TELEPHONE MEMO TO THE FILE

(Please complete with typewriter or ballpoint pen)

Call To: _____

Call From: D-10

Date of Call: 10/18/64

File No.: _____

Phone No.: (____) _____

Subject: _____

(continued)

Information for File:

of contamination were not given. Don't know if there is a well accessible for sampling. B & W Building was in receivership to local bank which is now being managed by FDIC — making FDIC liable party or at least property owner. FDIC is aware of the contamination and would like resolution of problem.

3) Calhoun, Howard County — Groundwater contamination by hydrocarbons. Level of contamination was not given over the phone. D-10 indicates they do have sample analyses. Type of contamination is unknown.

4) North Dixie Chromium — Ground water contamination in north Odessa. An isolated water well (domestic) shows chromium contamination. Level of contamination was not indicated over the phone. Source of contamination is not known.

Signed: _____

(cont.)

**EPA
INSERTED
DOCUMENT
SEPARATOR**

TELEPHONE MEMO TO THE FILE

(Please complete with typewriter or black pen)

Call To: _____

Call From: D-10

Date of Call: 10/18/66

File No.: _____

Phone No.: (_____) _____

Subject: _____

(continued)

Information for File: _____

5) West 42nd Street - Several facilities in Odesa along West 42nd Street have chromium contamination in their wells. Basically an industrial area, but chrome platers or strippers in area. Source of contamination is not known. Level of contamination was not indicated.

D-10 was advised to complete an IOM containing all of the pertinent facts, including any and all analyses, and formally refer the cases to State Superfund through the appropriate channels. I did indicate that Presidio Pesticides and #3 Industrial Loop would be under investigation by Jones and Nance for the SSG to determine whether they were appropriate for inclusion on site registry.

Signed: _____

[Handwritten Signature]

CONFIDENTIAL
TEXAS WATER COMMISSION

INVESTIGATION REPORT

DISTRICT 10

Date Investigation Requested October 30, 1984 Source Bob Barker - Texas Department of th

Request for Assistance _____ or Complaint X

Name Anonymous Austin #EF8412001
Dist. Ref. #84-11C41

TYPE

Address Unknown

Pollution, Surface Water _____

Pollution, Ground Water XX

City, State, Zip Unknown

Solid Waste _____

Water Rights _____

Telephone Unknown

Others _____

Location Old B&W Building, #3 Industrial Loop, Midland, Midland County, Texas.

Alleged Problem The groundwater at the above location is discolored light green.

The property is currently owned by the EDIC.

Summary of Investigation B&W was formerly a metal fabrication, welding shop. Initial investigation conducted by Joan Middleton revealed the water to be green. Analyses taken by Ms. Middleton on December 13, 1984 revealed chromium at 1.66 mg/l.

☐ Interim Status of Corrective Action if problem is not yet resolved

☒ Final Resolution of Problem: An additional investigation (see attachment) completed January 14, 1986 consisted of sampling surrounding water wells and sampling of a nearby caliche pit used for disposal of various types of waste. No chromium was found in any other samples taken. On March 17, 1986 it was learned that an old drilling mud company was located approximately 1/4 mile to the northwest of the contaminated well. Soil samples showed hazardous levels of hexavalent chrome. Appropriate measures will be taken to insure clean-up of this site.

Date and method of notification of person making request for assistance or complaint: Paul Evans with the EDIC
will be updated with each new development.

County Midland Segment No. 1412

River Basin Colorado Permit No. N/A

Matt Tokheim
Matt Tokheim, Secretary of District 10

William F. Lockey
William F. Lockey, District Manager
Date July 15, 1986

FDIC

Federal Deposit Insurance Corporation

April 16, 1985

William F. Lockey, Supervisor
Texas Department of Water Resources
206 W. 5th St.
Odessa, Texas 79761

SUBJECT: Midland Consolidated Office
FDIC-#3 Industrial Loop, East Midland, Texas
Chromium Contamination

Dear Mr. Lockey,

For your information, at The Texas Department of Water Resources, I wish to give you a copy of the latest water testing report done at #3 Industrial Loop East by Martin Water Labs in Midland. As is apparent, the contamination has increased greatly during the last six months.

- Thank you for your assistance during the last few weeks.
- Please let us know of any progress.

Very truly yours,

Paul D. Evans
Paul D. Evans
Liquidation Assistant

PDE/lkw

APR 18 1985

RESULT OF WATER ANALYSES

TO Mr. Paul Evans
P.O. Box 3148, Midland, Texas

LABORATORY NO. 485145
 DATE RECEIVED 4-10-85
 BY 4-12-85

COMPANY _____ **VDIC**

1, 2, 3, 4

FIELD OR POOL?

SECTION _____ BLOCK _____, BOULEVARD _____, CITY _____, STATE _____, ZIP _____

SOURCE OF SAMPLE AND DATE TAKEN

Raw water - taken from water well @ #3 Industrial Loop, East. 4-10-85

Maximum contents for drinking water as recommended by the Texas Dept. of Health.

140. 3

9.3.3

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.				
Gravimetric Sampled				
Gravimetric Method				
Excess, rate as HCO_3				
Supersaturation as CaCO_3				
Unsaturation as CaCO_3				
Total hardness as CaCO_3				
Calcium as Ca				
Magnesium as Mg				
Sodium and Potassium				
Sulfate as SO_4				
Chloride as Cl				
Total Fe				
Iron as Fe				
Aluminum as Al				
Silica as SiO_2				
Sulfate as SO_4				
Total Solids Calculated				
Temperature 45				
Carbon Dioxide Calculated				
Dissolved Oxygen Analysis				
Hydrogen Sulfide				
Residual Ammonia at 22° F.				
Suspended Oil				
Exposable Solids as Meq				
Volume Filtered ml				
Chromium as Cr (Hexavalent)	2.52	0.05		

Results Reported As: g/mol or g/mol

Additional Designations And Remarks: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 1

12

W. Reagan White, B.S.

Texas Water Commission

INTEROFFICE MEMORANDUM

TO : Bill Brown, P.E., Field Operations Liaison,
Hazardous and Solid Waste Division

DATE: January 14, 1986

THRU :

FROM : Matt Tokheim, Engineering Technician III, District 10, Field Operations
Division

SUBJECT: Chromium Contamination of the old B & W Building water well in Midland,
Midland County

Introduction

This report covers the findings of an investigation of groundwater contamination of a water well located in the industrial complex on the southwest side of Midland at #3 Industrial Loop. The investigation was initiated by Joan Middleton of the TDWR District 10 office as a result of an anonymous complaint on October 30, 1984. The property with the contaminated well was the B & W Building and is currently owned by the FDIC.

Nature of Problem

According to the complainant, the well water was a light green color. The original sample taken on October 31, 1984 showed no chromium present. Small levels of zinc and strontium were found. A later sample taken on December 13, 1984 revealed a chromium level of 1.6 ppm (See Attachment). The owner of the building reported that the water was this color when the well was drilled in 1981. This building has been vacant for roughly two years. The building was formerly used as a metal fabrication, welding shop.

Details of the Investigation

Joan Middleton, District 10 field representative, conducted the initial field investigation on December 4, 1984. Water samples and water table depths were taken of available wells in the surrounding area. The investigation was re-assigned to the writer in July of 1985 after Ms. Middleton acquired employment with the EPA.

Water wells in the area are completed in the very southern portion of the Ogallala Aquifer. Published data on the Ogallala in this area suggest an east-southeast hydraulic gradient (See Attachment). This flow direction roughly corresponds to the topography of the area. The Southern Ogallala formation is composed of 60-70% coarse grained, grey to red sand, 20-30% varicolored clay and silt, and 10-20% gravel. The Ogallala is underlain unconformably by a heterogeneous surface of Cretaceous valleys and peaks. Areas of the Ogallala in Ector, Midland, and Glasscock Counties that are underlain by this Cretaceous Trinity Sands Aquifer and have a large, saturated thickness, are generally considered to be hydraulically connected. The average saturated thickness of the Ogallala in the area of the contamination is 40-60 feet which is probably sufficient for the aquifers to be hydraulically connected. In the upper portion of the Ogallala in much of the Southern High Plains Aquifer there is what is known as a "Caprock". This aquiclude is

10M to Bill Brown
From Matt Tokheim
Subject: Chromium Contamination, Midland County

Page 2

basically a layer of caliche, 10-20 feet thick with low primary porosity and permeability. In some areas of the aquifer this caliche bed is fractured and or dissolved offering a higher rate of travel for fluids due to secondary porosity and permeability. A nearby excavation reveals this caliche to be slightly fractured on top with a gradational hardening effect with greater depth. Post Ogallala deposits are eolian sand and silt about 5 feet thick. Water from the Ogallala in this area is a sulfate chloride type. Dissolved solids are 1000-2000 mg/l. Specific yield from the aquifer in this area is approximately 12%. Permeability of the sand and gravel beds of the Ogallala is on the order of 3.28×10^{-4} ft/s. This is a theoretical value for unconsolidated, clean sand and may be subject to variation with actual local formation characteristics.

As shown in Figure 1, the contaminated well is on the edge of an industrial complex. Water depths and samples were taken from these water wells from an area to the west, around the north to the northeast. One well to the far southwest and another well to the east were sampled. All these wells were found to be clean. Figure 1 shows water table depths at the different wells as measured during the investigation. Figure 2 is a contour of water table elevations calculated using measured depths corrected for topography and indicates a slight hydraulic gradient to the west-northwest. This is directly opposite to the natural gradient but is possible due to drawdown of the water table caused by pumping of nearby wells.

A sample taken from the contaminated well at the B & W Building on December 13, 1984 showed chromium levels of 1.6 ppm. A private sample taken in April of 1985 was reported to have shown levels of 2.5 ppm. Wells No. 5, 10, 11 all show a trace of chromium but levels are all far below the EPA drinking water standard.

On June 13, 1985 the writer followed up on an anonymous tip that there had been a surface impoundment used for wastes in the Texas Plastics lot across the street to the west of the B & W building. No visible signs of such an impoundment were visible on the surface. A hand auger was used for subsurface sampling in several places. No discolored or odoriferous soil was observed, and no other evidence could be found. A sample was taken just to the east of what appeared to be an active septic-type drain field emanating from Texas Plastics and analyzed for EP Toxic chromium. (See Sample No. 13). Analysis showed no EP Toxic chromium. A composite soil sample from the north caliche pit was also taken this day. Analysis showed no EP Toxic chromium (See Sample #17). On August 18, 1985 more samples were taken at the NW corner of the southern pit (Sample #16). The other was a blue powdery substance, several partially filled bags of which were found in the north pit (Sample #15). Both samples showed no EP Toxic chromium. A large portion of the southern pit is covered over with cement. It appeared that other refuse had been covered by this cement. Dowell Schlumberger has used this caliche pit for a dump site in the past. On January 22, 1985 Joan Middleton collected two of the many different bags. One labeled Kolite, another calcium chloride. Because of the many different wastes disposed of in this pit much of which is covered over by cement, and because of the shallow water table depth of approximately 25 feet, the pit being greater than 15 feet deep and the possibility of a slight hydraulic gradient to the west - northwest, it is believed by the writer that the source of contamination is somewhere in the cement covered portion of this pit. Another possible source could be the Dowell Schlumberger facility located .4 miles to the north on Industrial Loop. However according to Dowell personnel, chromates have never been used at this facility. Also soil samples taken around an in ground tank at this location showed no chromium. Some water wells between

10M to Bill Brown
From Matt Tokheim
Subject: Chromium Contamination, Midland County

Page 3

Dowell and the contaminated well did show traces of chrome. However, these levels were very small and some of the other wells located in between were clean. A Champion Chemical facility located to the northwest has used a small amount of chromium in the past. This facility has no in ground tanks or surface impoundments. A sample was taken from a small pool of stormwater on the Champion property and found to contain no EP Toxic chrome. The Champion facility will be considered as only a minor suspect. No other obvious possible sources were located during the investigation. However the area under consideration is a large industrial complex with many different businesses.

Due to the information gathered in this investigation, it is believed by the writer that the source of this contamination is probably the caliche pit to the southeast of the contaminated well. At the present time, all reasonable possible avenues and resources at the district level have been exhausted. Because it is an industrial area District 10 inspectors are frequently in the area. This report will be updated upon further developments or upon discovery of other pertinent information.

This is submitted for information only.

Signed:

Matt Tokheim
Matt Tokheim

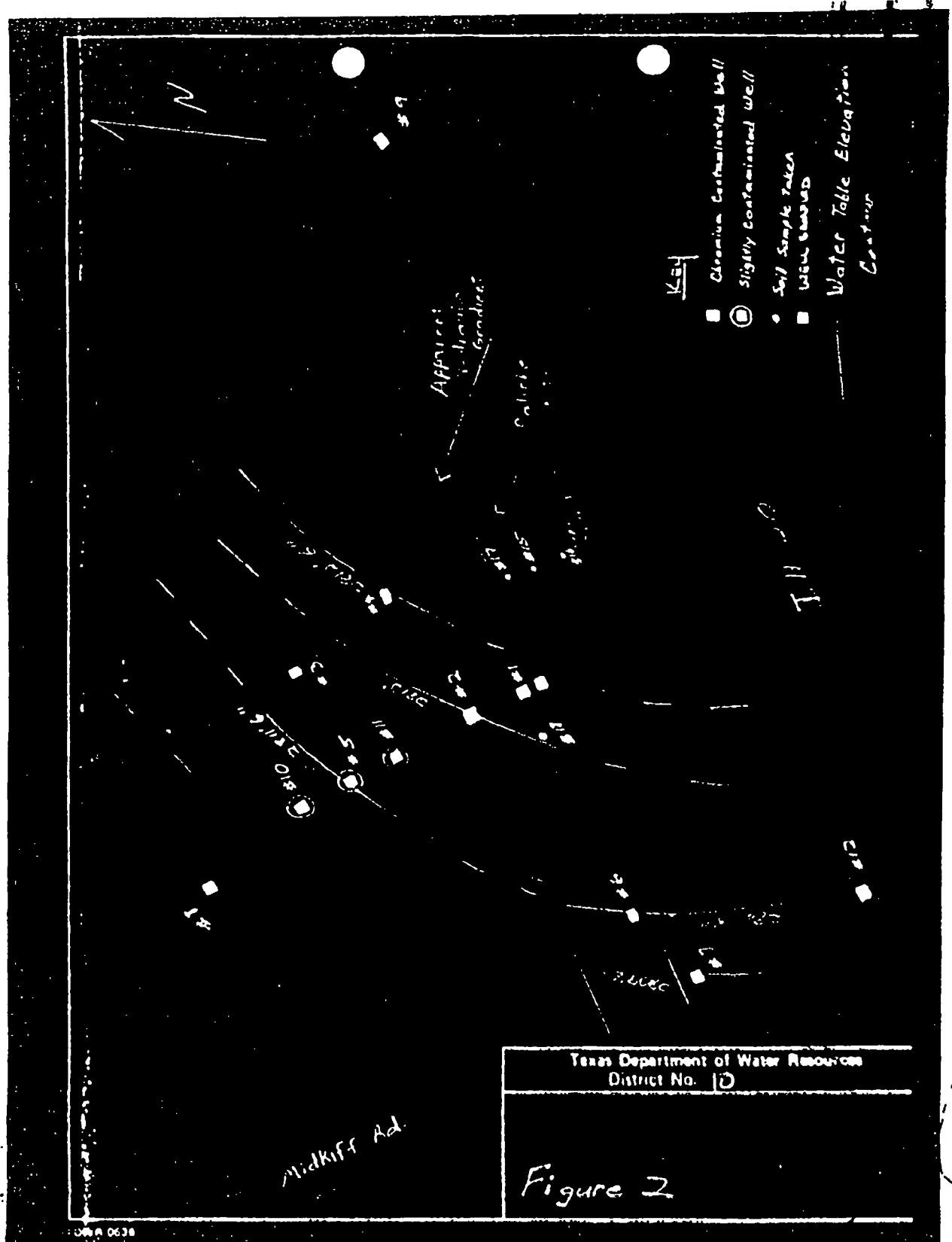
Approved:

William F. Lockett
William F. Lockett,
District Manager



Figure 1





TEXAS WATER QUALITY BOARD

No HM 07398

District 10

County Ariz. Basin Colorado

Discharger Name B. W. Bldg. - FDI

Time Collected 9:30 a.m.

Plant Name 113 Industrial

Point of Collection 113 on site

Method of Flow Measurement

113 on site 15 min

PERMIT NUMBER

PAGE NO

DATE

Chlorine Contact Time

Date Shipped 12/13/84

Collector's Signature

21 CODE 26 PARAMETER VALUE

35 CODE 40 PARAMETER VALUE

49 CODE 54 PARAMETER VALUE 62

1000

Water Temperature (°F)

pH

0.00

Turbidity (NTU)

0.00

0.00

0.00

0.00

TEXAS WATER QUALITY BOARD

No HM 07398

District 10

Lab Used EW5-800

Sample Heavy Metals

Material Sampled Raw, Partially Treated

Grab

Composite

Hr

Method of Preservation

Observations

Analysis Tags

Date Completed 12-14-84

Analyst's Signature

21 CODE 26 PARAMETER VALUE

35 CODE 40 PARAMETER VALUE

49 CODE 54 PARAMETER VALUE 62

Arsenic (ug/l)

Barium (ug/l)

0.00

1.50

Cadmium (ug/l)

Chromium (ug/l)

0.00

0.00

Copper (ug/l)

Manganese (ug/l)

0.00

0.00

Nickel (ug/l)

Selenium (ug/l)

0.00

0.00

Mercury (ug/l)

Silver (ug/l)

0.00

0.00

No. GW

TEXAS DEPARTMENT OF WATER RESOURCES

P.O. Box 13087, Capitol Station
Austin, Texas 78711Work No. 7077Org. No. 540

Sample No. _____

Owner B&W Bldg - Mr. Harold Burton Address #3 Industrial Loop Zip _____County Midland Well No. _____Location SE corner of Industrial Loop - MidlandDate Drilled ~ 1981 Depth _____ Aquifer OgallalaWater Level in well Sampled After Pumping ~ 15 Min. (Hrs.) Yield _____ GPM Temperature _____ °FPoint of Collection spigot on north side of building Appearance _____ Clear _____ Turbid light green Color _____Use has been vacated for 1 year Remarks _____ (Over)Date Collected 10/31/84 Time ~ 3:40 p.m. By Jean MitchellSend copy of completed analysis to Dist 10 - J Mitchell TDWR Office No. 10

TDWR-07:8

No. GW

2164

TEXAS DEPARTMENT OF WATER RESOURCES

P.O. Box 13087, Capitol Station

Work No. 7072Org. No. 540

Sample No. _____

Point of Collection spigot on north side of buildingLab Used TDH Lab No. _____ Method of Preservation seeType of Facility welding shop Date Completed 11-16-84 Analyst's Signature W.C.

	Mg/l	EPM		Mg/l	EPM	Other Ions	Mg/l
Silica	<u>51</u>		Carbonate	<u>0</u>		<input type="checkbox"/>	
Calcium	<u>116</u>	<u>8.32</u>	Bicarbonate	<u>387</u>	<u>4.7</u>	<input type="checkbox"/>	
Magnesium	<u>24</u>	<u>5.04</u>	Sulfate	<u>430</u>	<u>2.96</u>	<input type="checkbox"/>	
Sodium	<u>231</u>	<u>14.39</u>	Chloride	<u>457</u>	<u>13.73</u>	<input type="checkbox"/>	
	Total					<input type="checkbox"/>	
<input type="checkbox"/> Potassium	<u>10</u>	<u>0.26</u>	Nitrate	<u>13.01</u>	<u>0.19</u>	<input type="checkbox"/>	
<input type="checkbox"/> Iron		<u>38.21</u>	pH <u>7.5</u>	Total	<u>27.58</u>	<input type="checkbox"/>	
<input type="checkbox"/> Manganese			Dissolved Solids (sum)	<u>116.94</u>		<input type="checkbox"/>	

Remarks _____

Total Alkalinity as CaCO₃ 235 (4.7)Total Hardness as CaCO₃ 678 (13.56)Specific Conductance (Microhm/cm) 2040

"C" Items will be analyzed if checked, total iron requires separate sample.

TEXAS WATER QUALITY BOARD

No HM07397

District

County

Basin

Discharger Name

Time Collected

Plant Name

Point of Collection

Method of Flow Measurement

PERMIT NUMBER

PAGE

DATE

Chlorine Contact Time

NO

Date Shipped

Collector's Signature

21 CODE

26 PARAMETER VALUE

35 CODE

40 PARAMETER VALUE

49 CODE

54 PARAMETER VALUE 62

Flow (gpd)

Water Temperature (°F)

pH

DO (mg/l)

Turbidity (NTU)

0 0 0 0 0

0 0 3 0 0

TEXAS WATER QUALITY BOARD

No HM07397

District

Lab Used

Lab No

EW5-535

Type Sample Heavy Metals

Material Sampled Raw, Partially Treated

Grab

Composite

Hr

Method of Preservation

Observations

Type Facility

Auxiliary Tags

Date Completed

Analyst's Signature

21 CODE

26 PARAMETER VALUE

35 CODE

40 PARAMETER VALUE

49 CODE

54 PARAMETER VALUE 62

Arsenic (ug/l)

Barium (ug/l)

0 1 0 0 0

0 1 0 0 0

Cadmium (ug/l)

Chromium (ug/l)

0 1 0 0 0

0 1 0 0 0

Lead (ug/l)

Manganese (ug/l)

0 1 0 0 0

0 1 0 0 0

Nickel (ug/l)

Selenium (ug/l)

0 1 0 0 0

0 1 0 0 0

Zinc (ug/l)

0 1 0 0 0

Copper (ug/l)

0 1 0 0 0

Mercury (ug/l)

0 1 0 0 0

Silver (ug/l)

0 1 0 0 0

PERMIT NUMBER		PAGE NO.		DATE		Chlorine Contact Time	
1		2		3		4	
5		6		7		8	
9		10		11		12	
13		14		15		16	
17		18		19		20	
21		22		23		24	
25		26		27		28	
29		30		31		32	
33		34		35		36	
37		38		39		40	
41		42		43		44	
45		46		47		48	
49		50		51		52	
53		54		55		56	
57		58		59		60	
61		62		63		64	
65		66		67		68	
69		70		71		72	
73		74		75		76	
77		78		79		80	
81		82		83		84	
85		86		87		88	
89		90		91		92	
93		94		95		96	
97		98		99		100	
101		102		103		104	
105		106		107		108	
109		110		111		112	
113		114		115		116	
117		118		119		120	
121		122		123		124	
125		126		127		128	
129		130		131		132	
133		134		135		136	
137		138		139		140	
141		142		143		144	
145		146		147		148	
149		150		151		152	
153		154		155		156	
157		158		159		160	
161		162		163		164	
165		166		167		168	
169		170		171		172	
173		174		175		176	
177		178		179		180	
181		182		183		184	
185		186		187		188	
189		190		191		192	
193		194		195		196	
197		198		199		200	
201		202		203		204	
205		206		207		208	
209		210		211		212	
213		214		215		216	
217		218		219		220	
221		222		223		224	
225		226		227		228	
229		230		231		232	
233		234		235		236	
237		238		239		240	
241		242		243		244	
245		246		247		248	
249		250		251		252	
253		254		255		256	
257		258		259		260	
261		262		263		264	
265		266		267		268	
269		270		271		272	
273		274		275		276	
277		278		279		280	
281		282		283		284	
285		286		287		288	
289		290		291		292	
293		294		295		296	
297		298		299			

[illegible]

1142

1952

100

Appendix

1 cleaned

4.15 PM

11/10/2019

31

Lab Used

057:

District

Lab Used

Lab 1

Material Sampled - Row, Partially Treated.

EW5- 1024

Type Sample: Heavy Metals

Method of Preservation

Grab

Composite:

146

Type Facility

Observations

Auxiliary Tags

Date Completed

Analyst's Signature _____

7 FEB 25 1965

No. HM

District

County

Basin

Discharger Name

Date Collected

Plant Name

Point of Collection

Method of Flow Measurement

DATE
Mo Day Year
9 15 1975

25 CODE 26 PARAMETER VALUE 35 CODE 40 PARAMETER VALUE 45 CODE 50 PARAMETER VALUE

EXAS DEPARTMENT OF WATER RESOURCES

1025

FEB 23 1975

No. HM

District

County

Basin

Discharger Name

Time Collected

Plant Name

Point of Collection

Method of Flow Measurement

PERMIT NUMBER	PAGE NO.	SUB NO.	DATE			DAY					
			Mo.	Day	Yr.						
1	9	10	12	13	14	15	16	17	18	19	20

Chlorine Contact Time

Date Shipped

Collector's Signature

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
Flow (gpd)		Water Temperature (°F)		pH	
0	0	0	0	0	0
D.O. (mg/l)		Turbidity (JTU)			
0	0	0	0	0	0

TEXAS DEPARTMENT OF WATER RESOURCES

No. HM

District

Lab Used

Lab No.

Type Sample Heavy Metals

Material Sampled Raw, Partially Treated, E

EWS- 1023

Grain

Composite

Method of Preservation

Observations

Type Facility

Auxiliary Type

Date Collected

Analyst's Signature

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
Chromium					
Lead					
Nickel					
Zinc					

FEB 25 1965

TEXAS WATER QUALITY BOARD

No. **HM 07400**

District **1**

County **Midland**

Basin **South**

Discharger Name **City of Midland**

Time Collected **12:00 PM**

Plant Name **City of Midland**

Point of Collection **City of Midland**

Method of Flow Measurement **Flowmeter**

Chlorine Contact Time **15 minutes**

PERMIT NUMBER **1**

PAGE **1**

DATE **12/13/87**

Date Shipped **12/13/87**

NO **1**

SP **1**

Mo **12**

Collector's Signature **[Signature]**

21 CODE **1**

26 PARAMETER VALUE **Flow (gpd)**

37 CODE **1**

40 PARAMETER VALUE **Water temperature (°F)**

49 CODE **1**

54 PARAMETER VALUE **pH**

0 0 0 5 0 0

0 0 0 1 1 1

0 0 4 0 0 0

D.O. (mg/l)

27 CODE **1**

40 PARAMETER VALUE **Durability (10)**

49 CODE **1**

54 PARAMETER VALUE **0 0 3 0 0 0**

0 0 3 0 0 0

0 0 0 0 0 0

TEXAS WATER QUALITY BOARD

No. **HM 07400**

District **1**

Lab. Used **Lab. S**

EW5-802

Type Sample **Heavy Metals**

Material Sampled **Raw, Partially treated**

Crab **1**

Composite **1**

Method of Preservation **1**

Observations **1**

Type Facility **1**

Accessory Tags **1**

Date Completed **12/14/87**

Analyst's Signature **[Signature]**

21 CODE **1**

26 PARAMETER VALUE **As (mg/l)**

35 CODE **1**

40 PARAMETER VALUE **Bromine (mg/l)**

49 CODE **1**

54 PARAMETER VALUE **0 1 0 0 2**

0 1 0 0 2

0 1 0 0 7

0 1 0 0 2

Chromium (ug/l)

0 1 0 0 1 1

0 1 0 0 4 2

0 1 0 0 1 1

0 1 0 0 1 1

0 1 0 0 0 0

0 1 0 0 5 1

0 1 0 0 5 5

0 1 0 0 0 0

0 1 0 0 6 7

0 1 0 0 6 7

0 1 0 0 0 0

0 1 0 0 6 7

0 1 0 0 6 7

0 1 0 0 0 0

0 1 0 0 6 7

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TEXAS WATER QUALITY BOARD

No. HM 07399

District 10

County Milam

Basin Colorado

Discharger Name Mr. G. L. Brown

Time Collected 2:45 PM

Plant Name S. L. Brown

Point of Collection 1/2 SE corner

Method of Flow Measurement 1. Manual

Chlorine Contact Time

PERMIT NUMBER

PAGE NO

DATE

Date Shipped 12/15/77

Collector's Signature

21 CODE 26 PARAMETER VALUE 35 CODE 40 PARAMETER VALUE 49 CODE 54 PARAMETER VALUE 62

Flow (gpd)

Water Temperature (°F)

pH

DO (mg/l)

Turbidity (NTU)

DO (mg/l)

Turbidity (NTU)

TEXAS WATER QUALITY BOARD

No. HM07399

District

Lab Used

Lab No. EW5-801

Type Sample Heavy Metals

Method of Preservation

Grab

Composite

HR

Method of Preservation

Tag Family

Analysis Tags

Date Completed

Analyst's Signature

Observations

Observations

21 CODE 26 PARAMETER VALUE 35 CODE 40 PARAMETER VALUE 49 CODE 54 PARAMETER VALUE 62

Asbestos (mg/l)

Asbestos (mg/l)

Asbestos (mg/l)

Asbestos (mg/l)

Asbestos (mg/l)

Asbestos (mg/l)

Asbestos (mg/l)

Asbestos (mg/l)

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Asbestos (mg/l)

צדק

K

Ester

Robert E. Smith

Tea and Coffee

End Page 11/11

3.75

Point of Collection

Self-Inspection

Method of Flow Measurement

TEXAS WATER COMMISSION

10

1

سید محمد - - - - -

... 630, 1960

15

Manager Coupled: Raw. Partner's Treates, P

EWG 0085

Compu:0

Department of Transportation 100

Isaac Newton *Latin* *1687*

Aluminum, 100%—D. 125

Date Completed _____

Analysis: Significant

Chromatids

Leach, J. L.

OCT 17 1985

TEXAS DEPARTMENT OF WATER RESOURCES
INVESTIGATION REPORT
DISTRICT 10

RECEIVED

NOV 30 '84

ENVIRONMENT AND
FIELD OPERATIONS

Date Investigation Requested October 30, 1984 Source Mr. Jed Barker-Texas Department of Health

Request for Assistance _____ or Complaint X

Name Anonymous Dist. Ref. #84-11C41

TYPE

Address Unknown

Pollution, Surface Water _____

Pollution, Ground Water _____

City, State, Zip Unknown

Solid Waste _____

Water Rights _____

Telephone Unknown

Others _____

Location B & W Building, #3 Industrial Loop Midland, Midland County

Alleged Problem The ground water at the B & W Building location is discolored light green.

Summary of Investigation B & W Building has been vacant for roughly a year (B & W was formerly a metal fabrication, welding shop). The investigation on November 1, 1984 of the B & W Building revealed that the well water was discolored a light green. The owner stated the ground water was this color when the water well was drilled in approximately 1981. The well was pumped for approximately 15 minutes before samples were collected. The samples have been shipped to the Texas Department of Health laboratory in Austin.

XX Interim Status of Corrective Action if problem is not yet resolved

Final Resolution of Problem A preliminary analysis for any chromium content was run by the City of Odessa laboratory on November 1, 1984 - 1.3 mg/l of chromium was present. The Texas Department of Health laboratory analyses are currently pending. Further sampling of area ground water wells will be conducted to determine the extent of chromium contamination, as well as, a possible source of contamination.

Method of notification of person making request for assistance or complaint As this was an anonymous complaint, the complainant was not notified of the results of the investigation.

County Midland Segment No. 1412

River Basin Colorado Permit No. N/A

William F. Lockey
Signature of Investigator
William F. Lockey, Supervisor
Date November 26, 1984

OVERSIZE DOCUMENTS, MAPS, & PHOTOS

Record Series: SITE DISCOVERY
File #: 981-055-080

The below listed documents, from the above referenced file, that belong in this location in the file were not microfilmed because of their size and/or media format. See the Records staff for the location of the following oversized documents and/or photographs:

DATE ON DOCUMENT	DESCRIPTION OF DOCUMENT
NA	Abandoned BLDG (B-10)
NA	SITE Inspection Report
	SITE LOCATION MAP 4 sheets